

RICE UNIVERSITY

**Rethinking Viola Pedagogy:
Preparing Violists for the Challenges of Twentieth-Century Music**

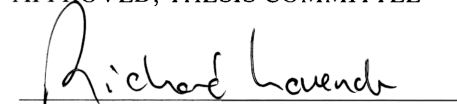
by

Molly Adams Gebrian

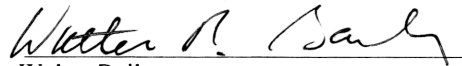
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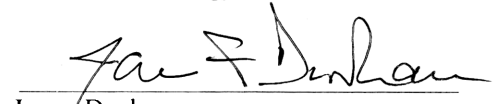
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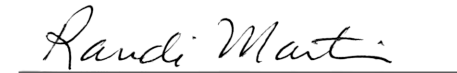
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ABSTRACT

Rethinking Viola Pedagogy: Preparing Violists for the Challenges of Twentieth-Century Music

by

Molly Adams Gebrian

The majority of standard solo repertoire that violists perform was written in the twentieth century, but the pedagogical materials violists study are largely transcriptions of violin etudes, studies, and scales, which were all written in the nineteenth century or earlier. Music written in the twentieth century uses a language and techniques that are quite different from those found in older, tonal music. Because of this, violists are often unprepared for the challenges of their standard solo repertoire, and the pedagogical materials they study do not fulfill their purpose: to educate students in the skills necessary for successful musical performance. The first part of this document is historical, attempting to explain how the viola has arrived in the early twenty-first century without its own unique body of pedagogical materials suited its repertoire. The second part of this document is practical: it proposes a pedagogy for the viola that will help to better prepare students to play our standard repertoire. This part of the document uses an extensive number of musical examples from the standard twentieth-century repertoire to illustrate how the various etudes, studies, exercises, and scales presented can be used to help students in tackling the challenges of twentieth-century music more successfully.

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CONTENTS

ABSTRACT	i
ACKNOWLEDGEMENTS	ii
TABLE OF CONTENTS	iv
LIST OF MUSICAL EXAMPLES	vi
PREFACE	xviii
INTRODUCTION	1
PART ONE – A (BRIEF) HISTORY OF THE VIOLA	4
Chapter 1: The Viola from the Sixteenth to Nineteenth Centuries	4
Chapter 2: The Paris Conservatoire	12
Chapter 3: The Modern History of the Viola	17
Chapter 4: A Selective History of Pedagogical Materials for the Violin and Viola	23
Chapter 5: The Current State of Pedagogical Materials for the Viola	27
PART TWO – A MORE APPROPRIATE PEDAGOGY FOR THE VIOLA	30
Chapter 1: Pitch	32
1.1 Non-tonal scales	32
a. Pentatonic and modal scales	33
b. Whole-tone	38
c. Octatonic	41
d. Chromatic scales	44
e. Other scales	46
f. Almost chromatic scales	54
1.2 Double-stops	56
a. Fourths	57

b. Fifths	64
c. Tritones	67
d. Sevenths	68
1.3 Chords	74
1.4 Extended playing in high positions	78
1.5 Large leaps	84
1.6 Harmonics	91
1.7 Quartertones	99
Chapter 2: Rhythm	102
2.1 Mixed meter	103
2.2 Irregular subdivisions	112
2.3 Subdivision (non-mixed meter)	120
2.4 Differentiating similar rhythms	124
Chapter 3: Extended Techniques	131
3.1 <i>Sul ponticello</i>	131
3.2 <i>Sul tasto</i>	134
3.3 <i>Pizzicato</i>	135
3.4 <i>Tremolo</i>	141
3.5 Other bow techniques	144
Chapter 4: The Language of Twentieth-Century Music	146
CONCLUSION	151
APPENDIX 1	154
APPENDIX 2	159
BIBLIOGRAPHY	165

LIST OF MUSICAL EXAMPLES

1.1: Kimber <i>20th-Century Idioms for Violists</i> , Pentatonic study, mm. 13-20	34
1.2: Hindemith <i>Der Schwanendreher</i> , movement I, 1 before D to 2 after D	34
1.3: Hindemith Sonata for Viola and Piano op. 11, no. 4, movement III, 3 before #15 to 1 before #15	35
1.4: Hindemith <i>Der Schwanendreher</i> , movement II, beginning to 1 before B	35
1.5: Hindemith <i>Der Schwanendreher</i> , movement III, m.7 to 1 before A	36
1.6: Hindemith Sonata for Viola and Piano op. 11, no. 4, movement II, 6 before #13 (Variation IV) to 4 before #13	36
1.7: Clarke Sonata for Viola and Piano, movement I, beginning to #1	37
1.8: Clarke Sonata for Viola and Piano, movement III, 7 before #26 to 2 before #27	37
1.9: Clarke Sonata for Viola and Piano, movement III, #35 to #36	38
1.10: Whole-tone scale with “crab” fingerings	39
1.11: Kimber <i>20th-Century Idioms for Violists</i> , Whole-Tone study, mm. 1-4	39
1.12: Kimber <i>20th-Century Idioms for Violists</i> , Whole-Tone study, mm. 25-27	40
1.13: Hindemith Sonata for Solo Viola op. 25, no. 1, movement II, mm. 51-54	40
1.14: Kimber <i>20th-Century Idioms for Violists</i> , Octatonic study, mm. 13-15	41
1.15: Kimber <i>20th-Century Idioms for Violists</i> , Octatonic study, mm. 21-22	41
1.16: Uhl <i>Zwanzig Etüden für Viola</i> , Etude No. 2, mm. 11-16	42
1.17: Uhl <i>Zwanzig Etüden für Viola</i> , Etude No. 2, mm. 41-48	42
1.18: Hindemith Sonata for Solo Viola op. 25, no. 1, movement II, mm. 20-35	43
1.19: Ligeti Sonata for Viola Solo, movement IV, m. 1	43
1.20: Ligeti Sonata for Viola Solo, movement IV, mm. 9-10	44
1.21: Ligeti Sonata for Viola Solo, movement IV, m. 18	44
1.22: Kimber <i>20th-Century Idioms for Violists</i> , Chromatic study, mm. 10-11	45
1.23: Kimber <i>20th-Century Idioms for Violists</i> , Chromatic study, mm. 15-17	45

1.24: Kimber <i>20th-Century Idioms for Violists</i> , Chromatic study, m. 13 and m. 23	45
1.25: Bartók Concerto for Viola and Orchestra, movement I, m. 243	46
1.26: Hindemith Sonata for Solo Viola op. 25, no. 1, movement I, mm. 25-27	46
1.27: The four different Pick Four patterns	47
1.28: Pick Four pattern 3142 in first position, ascending	47
1.29: Pick Four pattern 3142 in first position, ascending and descending	48
1.30: Pick Four pattern 3142 in first position, ascending and descending with increasingly longer slurs	48
1.31: Pick Four patterns with short-hand marking	49
1.32: Bartók Concerto for Viola and Orchestra, movement III, mm. 181-189 with Pick Four patterns	50
1.33: Uhl <i>Zwanzig Etüden für Viola</i> , Etude No. 3, mm. 5-8 with Pick Four patterns	50
1.34: Uhl <i>Zwanzig Etüden für Viola</i> , Etude No. 8, mm. 1-5 with Pick Four patterns	51
1.35: Bartók Concerto for Viola and Orchestra, movement III, mm. 213-221 with Pick Four patterns	52
1.36: Hindemith <i>Der Schwanendreher</i> , movement III, 4 after C to 7 before E with Pick Four patterns	52
1.37: Hindemith Sonata for Viola and Piano op. 11, no. 4, movement II, 3 before #9 to #9	53
1.38: Hindemith Sonata for Viola and Piano op. 11, no. 4, movement II, 3 before #9 to #9 with Pick Four patterns	53
1.39: Bartók Concerto for Viola and Orchestra, movement I, mm. 241-243	54
1.40: Bartók Concerto for Viola and Orchestra, movement I, mm. 241-243 re-written	55
1.41: Bartók Concerto for Viola and Orchestra, movement I, m. 242 practice step 1	55
1.42: Bartók Concerto for Viola and Orchestra, movement I, m. 242 practice step 3	55
1.43: Ligeti Sonata for Viola Solo, movement VI, m. 68	57
1.44: Kimber <i>20th-Century Idioms for Violists</i> , Quartal study, mm. 17-19	58
1.45: Uhl <i>Zwanzig Etüden für Viola</i> , Etude No. 7, mm. 1-16	58
1.46: Bartók Concerto for Viola and Orchestra, movement II, mm. 70-78	59
1.47: Shostakovich Sonata for Viola and Piano, op. 147, movement II, mm. 106-118	59

1.48: Shostakovich Sonata for Viola and Piano, op. 147, movement II, mm. 225-229	59
1.49: Shostakovich Sonata for Viola and Piano, op. 147, movement II, mm. 187-190	60
1.50: Shostakovich Sonata for Viola and Piano, op. 147, movement III, mm. 52-57	60
1.51: Hindemith <i>Der Schwanendreher</i> , movement I, 2 before B	60
1.52: Ligeti Sonata for Viola Solo, movement VI, mm. 52-54	60
1.53: Hindemith <i>Der Schwanendreher</i> , movement II, 3 before B to 1 before B	61
1.54: Hindemith Sonata for Solo Viola op. 25, no. 1, movement III, mm. 1-3	61
1.55: Ligeti Sonata for Viola Solo, movement V, mm. 20-23	61
1.56: Ligeti Sonata for Viola Solo, movement V, mm. 31-40	62
1.57: Ligeti Sonata for Viola Solo, movement V, mm. 63-64	62
1.58: Hindemith Sonata for Viola and Piano op. 25, no. 4, movement I, mm. 46-49	63
1.59: Ligeti Sonata for Viola Solo, movement II, mm. 1-3	63
1.60: Ligeti Sonata for Viola Solo, movement VI, mm. 1-8	63
1.61: Bartók Concerto for Viola and Orchestra, movement I, mm. 160-162	65
1.62: Bartók Concerto for Viola and Orchestra, movement I, mm. 102-106	65
1.63: Hindemith Sonata for Solo Viola op. 25, no. 1, movement II, m. 49	66
1.64: Hindemith Sonata for Solo Viola op. 31, no. 4, movement III, m. 32-33	66
1.65: Hindemith Sonata for Solo Viola op. 31, no. 4, movement III, mm. 78-89	66
1.66: Hindemith Sonata for Solo Viola op. 25, no. 1, movement II, mm. 38-39	68
1.67: Bartók Concerto for Viola and Orchestra, movement I, mm. 133-135	68
1.68: Kimber <i>20th-Century Idioms for Violists</i> , Secundal study, mm. 13-18	69
1.69: Uhl <i>Zwanzig Etüden für Viola</i> , Etude No. 7, mm. 33-35	69
1.70: Hindemith <i>Der Schwanendreher</i> , movement I, m. 3	69
1.71: Hindemith <i>Der Schwanendreher</i> , movement II, B to 5 after B	70
1.72: Hindemith <i>Der Schwanendreher</i> , movement III, 2 before O to 5 after O	70
1.73: Hindemith Sonata for Solo Viola op. 25, no. 1, movement I, mm. 10-21	70

1.74: Hindemith Sonata for Solo Viola op. 25, no. 1, movement II, mm. 5-13	71
1.75: Hindemith Sonata for Solo Viola op. 25, no. 1, movement II, mm. 36-37	71
1.76: Hindemith Sonata for Solo Viola op. 25, no. 1, movement II, mm. 51-52	71
1.77: Hindemith Sonata for Solo Viola op. 31, no. 4, movement III, mm. 112-121	71
1.78: Ligeti Sonata for Viola Solo, movement II, mm. 1-20	72
1.79: Ligeti Sonata for Viola Solo, movement V, mm. 25-33	73
1.80: Penderecki <i>Cadenza per viola sola</i> , pg. 1 last line to pg. 2 first line	73
1.81: Chord example	74
1.82: Uhl <i>Zwanzig Etüden für Viola</i> , Etude No. 9, mm. 1-28	75
1.83: Ligeti Sonata for Viola Solo, movement III, mm. 57-60	75
1.84: Ligeti Sonata for Viola Solo, movement VI, m. 43	76
1.85: Ligeti Sonata for Viola Solo, movement VI, m. 51	76
1.86: Ligeti Sonata for Viola Solo, movement VI, mm. 52-58	76
1.87: Ligeti Sonata for Viola Solo, movement VI, mm. 61-69	76
1.88: Ligeti Sonata for Viola Solo, movement VI, m. 73	77
1.89: Hindemith <i>Der Schwanendreher</i> , movement I, 4 before K to 3 before K	77
1.90: Hindemith <i>Der Schwanendreher</i> , movement III, 9 before P to 4 after P	77
1.91: Hindemith Sonata for Solo Viola op. 11, no. 5, movement I, mm. 1-7	77
1.92: Bartók Concerto for Viola and Orchestra, movement I, mm. 74-76	78
1.93: Bartók Concerto for Viola and Orchestra, movement I, mm. 213-215	79
1.94: Bartók Concerto for Viola and Orchestra, movement II, mm. 30-37	79
1.95: Bartók Concerto for Viola and Orchestra, movement III, mm. 218-223	79
1.96: Walton Concerto for Viola and Orchestra, movement I, 2 after #2 to 4 after #2	79
1.97: Walton Concerto for Viola and Orchestra, movement II, 3 before #19 to #19	80
1.98: Walton Concerto for Viola and Orchestra, movement II, 1 before #25 to #25	80
1.99: Walton Concerto for Viola and Orchestra, movement III, 8 before #49 to 3 before #49	80

1.100: Walton Concerto for Viola and Orchestra, movement III, 3 after #62 to 7 after #62	80
1.101: Britten <i>Lachrymae</i> , 15 after #10 to 21 after #10	80
1.102: Fuchs <i>12 Caprices</i> , Caprice 6, mm. 1-6	81
1.103: Fuchs <i>12 Caprices</i> , Caprice 6, mm. 26-27	82
1.104: Penderecki <i>Cadenza per viola sola</i> , pg. 2 last 2 lines	83
1.105: Penderecki <i>Cadenza per viola sola</i> , pg. 2 lines 4 and 5	83
1.106: Ligeti Sonata for Viola Solo, movement I, mm. 28-29	83
1.107: Ligeti Sonata for Viola Solo, movement I, m. 37	84
1.108: C major scale jumping octaves	85
1.109: Knox <i>Viola Spaces</i> , “One Finger,” mm. 1-4	85
1.110: Knox <i>Viola Spaces</i> , “One Finger,” mm. 21-22	86
1.111: Knox <i>Viola Spaces</i> , “One Finger,” mm. 36-39	86
1.112: Knox <i>Viola Spaces</i> , “One Finger,” mm. 12-13	86
1.113: Knox <i>Viola Spaces</i> , “One Finger,” mm. 52-53	86
1.114: Bartók Concerto for Viola and Orchestra, movement I, mm. 37-38	87
1.115: Bartók Concerto for Viola and Orchestra, movement I, m. 113	87
1.116: Bartók Concerto for Viola and Orchestra, movement I, m. 117	87
1.117: Bartók Concerto for Viola and Orchestra, movement II, mm. 37-45	88
1.118: Bartók Concerto for Viola and Orchestra, movement III, mm. 13-21	88
1.119: Bartók Concerto for Viola and Orchestra, movement III, m. 43	88
1.120: Bartók Concerto for Viola and Orchestra, movement III, mm. 255-258	88
1.121: Hindemith <i>Der Schwanendreher</i> , movement III, 5 before T to 1 before T	89
1.122: Walton Concerto for Viola and Orchestra, movement II, 8 after #36 to the end	89
1.123: Walton Concerto for Viola and Orchestra, movement III, 3 after #62 to 7 after #62	89
1.124: Ligeti Sonata for Viola Solo, movement II, mm. 79-92	90
1.125: Ligeti Sonata for Viola Solo, movement IV, mm. 16-18	91

1.126: Uhl <i>Zwanzig Etüden für Viola</i> , Etude No. 13, mm. 1-8	92
1.127: Ligeti Sonata for Viola Solo, movement V, mm. 56-58	93
1.128: Knox <i>Viola Spaces</i> , “Harmonic Horizon,” mm. 26-43	94
1.129: Ligeti Sonata for Viola Solo, movement I, mm. 32 to the end	95
1.130: Knox <i>Viola Spaces</i> , “Harmonic Horizon,” mm. 1-10	96
1.131: Knox <i>Viola Spaces</i> , “Harmonic Horizon,” mm. 60-68	97
1.132: Knox <i>Viola Spaces</i> , “Harmonic Horizon,” m. 11	97
1.133: Penderecki <i>Cadenza per viola sola</i> , penultimate line to the end	98
1.134: Knox <i>Viola Spaces</i> , “Harmonic Horizon,” mm. 22-25	98
1.135: Ligeti Sonata for Viola Solo, movement I, mm. 1-9	100
1.136: Knox <i>Viola Spaces</i> , “In between,” mm. 1-4	100
1.137: Knox <i>Viola Spaces</i> , “In between,” mm. 71-73	101
2.1: Uhl <i>Dreißig Etüden für Viola</i> , Etude No. 6, mm. 1-15	104
2.2: Uhl <i>Dreißig Etüden für Viola</i> , Etude No. 30, mm. 1-16	104
2.3: Uhl <i>Zwanzig Etüden für Viola</i> , Etude No. 6, mm. 19-37	105
2.4: Kimber <i>20th-Century Idioms for Violists</i> , Mixed meter study, mm. 1-12	105
2.5: Kimber <i>20th-Century Idioms for Violists</i> , Mixed meter study, mm. 33-49	106
2.6: Martinu <i>Rhythmic Etudes</i> , Etude No. 1, mm. 1-11	107
2.7: Martinu <i>Rhythmic Etudes</i> , Etude No. 7, mm. 1-8	107
2.8: Ligeti Sonata for Viola Solo, movement II, mm. 1-8 with 8 th notes	108
2.9: Ligeti Sonata for Viola Solo, movement III, mm. 1-8	108
2.10: Ligeti Sonata for Viola Solo, movement III, mm. 1-8 re-written with common mistakes	109
2.11: Ligeti Sonata for Viola Solo, movement V, mm. 1-12	109
2.12: Ligeti Sonata for Viola Solo, movement IV, mm. 1-3	110
2.13: Ligeti Sonata for Viola Solo, movement IV, mm. 25-27	110
2.14: Hindemith Sonata for Solo Viola op. 25, no. 1, movement IV, mm. 1-12	111

2.15: Penderecki <i>Cadenza per viola sola</i> , pg. 2 last line	112
2.16: Uhl <i>Zwanzig Etüden für Viola</i> , Etude No. 3, mm. 10-17	113
2.17: Kimber <i>20th-Century Idioms for Violists</i> , Irregular Subdivisions of the Beat study, mm. 1-8	114
2.18: Clarke Sonata for Viola and Piano, movement I, mm. 5-6	114
2.19: Clarke Sonata for Viola and Piano, movement I, #7 to 5 after #7	114
2.20: Clarke Sonata for Viola and Piano, movement III, 6 after #29 to 8 after #29	114
2.21: Clarke Sonata for Viola and Piano, movement III, 6 before #36 to #36	115
2.22: Hindemith <i>Der Schwanendreher</i> , movement I, 5 before M to 2 before M	115
2.23: Bartók Concerto for Viola and Orchestra, movement I, mm. 19-20	115
2.24: Bartók Concerto for Viola and Orchestra, movement I, mm. 141-142	116
2.25: Bartók Concerto for Viola and Orchestra, movement II, mm. 10-11	116
2.26: Hindemith Sonata for Solo Viola op. 25, no. 1, movement, I mm. 39-41	116
2.27: Hindemith Sonata for Viola and Piano op. 11, no. 4, movement I, 4 before #2 to 3 after #2	117
2.28: Hindemith Sonata for Viola and Piano op. 11, no. 4, movement II, 1 before #13 to #13	117
2.29: Hindemith Sonata for Viola and Piano op. 11, no. 4, movement III, 7 before #14	117
2.30: Hindemith Sonata for Viola and Piano op. 11, no. 4, movement III, 4 after #28 to 5 after #28	118
2.31: Bartók Concerto for Viola and Orchestra, movement II, mm. 21-22	118
2.32: Hindemith Sonata for Viola and Piano op. 11, no. 4, movement III, 6 after #25 to 9 after #25	119
2.33: Hindemith Sonata for Viola and Piano op. 25, no. 4, movement I, mm. 122-127	119
2.34: Martinu <i>Rhythmic Etudes</i> , Etude No. 6, mm. 1-16	120
2.35: Martinu <i>Rhythmic Etudes</i> , Etude No. 5, mm. 12-14	121
2.36: Martinu <i>Rhythmic Etudes</i> , Etude No. 5, mm. 34-38	121
2.37: Uhl <i>Zwanzig Etüden für Viola</i> , Etude No. 10, mm. 7-12	122
2.38: Uhl <i>Zwanzig Etüden für Viola</i> , Etude No. 20, mm. 1-14	122
2.39: Uhl <i>Zwanzig Etüden für Viola</i> , Etude No. 20, mm. 37-52	122

2.40: Hindemith Sonata for Viola and Piano op. 11, no. 4, movement III, 7 after #29 to 12 after #29	123
2.41: Walton Concerto for Viola and Orchestra, movement III, 1 before #64 to 2 after #64	123
2.42: Uhl <i>Dreißig Etüden für Viola</i> , Etude No. 25, mm. 13-18	124
2.43: Uhl <i>Zwanzig Etüden für Viola</i> , Etude No. 14, mm. 29-36	124
2.44: Hindemith <i>Der Schwanendreher</i> , movement I, mm. 5-9	125
2.45: Hindemith <i>Der Schwanendreher</i> , movement I, 1 before D to D	125
2.46: Hindemith <i>Der Schwanendreher</i> , movement I, 8 before T to 2 after T	125
2.47: Hindemith <i>Der Schwanendreher</i> , movement III, D to 3 before E	126
2.48: Hindemith <i>Der Schwanendreher</i> , movement III, 1 after Q to 4 before R	126
2.49: Hindemith <i>Der Schwanendreher</i> , movement III, S to 4 before U	126
2.50: Bartók Concerto for Viola and Orchestra, movement I, m. 33	127
2.51: Bartók Concerto for Viola and Orchestra, movement I, m. 48-49	127
2.52: Hindemith Sonata for Solo Viola op. 25, no.1, movement I, mm. 20-21	127
2.53: Hindemith Sonata for Solo Viola op. 25, no.1, movement II, mm. 1-8	127
2.54: Hindemith Sonata for Solo Viola op. 25, no.1, movement III, mm. 29-32	128
2.55: Hindemith Sonata for Viola and Piano op. 11, no. 4, movement III, 7 after #32 to 4 before #33	128
2.56: Clarke Sonata for Viola and Piano, movement I, #1 to 7 after #1	129
2.57: Clarke Sonata for Viola and Piano, movement III, #33 to 5 after #33	129
2.58: Clarke Sonata for Viola and Piano, movement III, 5 after #40 to the end	129
3.1: Shostakovich Sonata for Viola and Piano, op. 147, movement I, mm. 161-170	132
3.2: Britten <i>Lachrymae</i> , #8 to #9	133
3.3: Knox <i>Viola Spaces</i> , “Beside the bridge,” mm. 53-64	133
3.4: Ligeti Sonata for Viola Solo, movement V, mm. 9-11	134
3.5: Ligeti Sonata for Viola Solo, movement VI, mm. 80-89	134
3.6: Knox <i>Viola Spaces</i> , “Ghosts,” mm. 1-5	135

3.7: Shostakovich Sonata for Viola and Piano, op. 147, movement I, mm. 1-9	136
3.8: Clarke Sonata for Viola and Piano, movement II, beginning to 2 before #17	136
3.9: Britten <i>Lachrymae</i> , #2 to #3	137
3.10: Hindemith Sonata for Solo Viola (1937), movement II, mm. 43-93	138
3.11: Knox <i>Viola Spaces</i> , “Nine Fingers,” m. 1	139
3.12: Knox <i>Viola Spaces</i> , “Nine Fingers,” m. 5	139
3.13: Knox <i>Viola Spaces</i> , “Nine Fingers,” m. 22	139
3.14: Knox <i>Viola Spaces</i> , “Nine Fingers,” m. 48	140
3.15: Knox <i>Viola Spaces</i> , “Nine Fingers,” mm. 64-65	140
3.16: Knox <i>Viola Spaces</i> , “Nine Fingers,” mm. 52-54	140
3.17: Berio <i>Sequenza VI per viola sola</i> , first 3 lines	141
3.18: Knox <i>Viola Spaces</i> , “Rapid repeat,” mm. 1-19	142
3.19: Knox <i>Viola Spaces</i> , “Rapid repeat,” mm. 58-59	142
3.20: Knox <i>Viola Spaces</i> , “Rapid repeat,” mm. 132-138	143
3.21: Knox <i>Viola Spaces</i> , “Rapid repeat,” mm. 106-110	143
3.22: Knox <i>Viola Spaces</i> , “Rapid repeat,” mm. 89-95	143
3.23: Knox <i>Viola Spaces</i> , “Rapid repeat,” mm. 116-119	144
3.24: Britten <i>Lachrymae</i> , 2 after #10 to 14 after #10	145
3.25: Kimber <i>Three Bagatelles</i> , Bagatelle #1 (Paris 1901), mm. 1-8	147
3.26: Kimber <i>Three Bagatelles</i> , Bagatelle #2 (Wien, 1922), mm. 1-9	147
3.27: Kimber <i>Three Bagatelles</i> , Bagatelle #3 (Berlin, 1928), mm. 1-9	148
3.28: Kimber <i>20th-Century Idioms for Violists</i> , Twelve-tone study, mm. 1-11	148
3.29: Kimber <i>20th-Century Idioms for Violists</i> , Various Techniques study, mm. 1-12	149

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PREFACE

The motivation for this dissertation came largely from my frustrations and observations as a student regarding the shortcomings of the standard pedagogical literature for the viola (etudes, exercises, scale studies, and the like). I never liked having to practice etudes and exercises, not because they were boring (although many are!), but because I felt that they were a waste of my time. It wasn't that I had a delusion that my technique was perfect and couldn't benefit from the practice of etudes and exercises (far from it!). Rather, etudes and exercises are supposed to be studied in preparation for certain repertoire, and while these etudes demanded so much of my practice time to perfect, they seemed to have nothing to do with the music I was playing. I have always been passionate about contemporary music and have played a great deal of it. That is fortunate, since the standard viola repertoire is disproportionately from the twentieth century, especially compared to the violin repertoire. However, most violists are given a steady diet of Flesch scales, Sevcik and Schradieck exercises, and etudes by Kreutzer, Dont, and Rode (with the occasional appearance of Lillian Fuchs). All of these, with the exception of Lillian Fuchs, of course, are transcriptions of works originally written for the violin and the bulk (and in many cases, the entirety) of a violist's technical preparation for successful musical performance is identical to that of a violinist's preparation.

The above-mentioned pedagogical works are all excellent and should surely be included in any violist's education. However, given that most of our standard solo literature has been written in the twentieth century (in direct contrast to the standard solo literature for the violin), these works do not provide sufficient preparation for a violist. For example, perfecting thirds, sixths, and octaves do not adequately prepare a violist to tackle the fourths and sevenths that permeate Hindemith (and are treated as consonances). Perfecting major and minor scales and arpeggios does not adequately prepare a violist for the non-traditional scales found in the Bartók concerto. Playing only in simple or compound meters does not prepare a violist for the Ligeti sonata. The challenges we violists face in our standard literature are very different from those that face violinists, and our pedagogical literature should reflect that. As a

student, I was very frustrated by this disconnect and felt that etudes didn't really help me very much. As a result, I learned most of my technique through the repertoire, which many instrumental pedagogues will argue is not ideal. I hope that through this document, I will be able to advocate for and present a pedagogy for the viola that is much more suited to our repertoire so that future students will be better prepared for the wonderful body of standard twentieth-century repertoire for the viola and less frustrated by their lack of preparation for it.

INTRODUCTION

The premise of this dissertation would have been unimaginable one hundred years ago, even seventy years ago, well within the lifetime of many of those still alive today. Not only was the viola still emerging as a viable solo instrument, and its unique repertoire still in its infancy or not even conceived of yet, but the very idea of studying viola at the collegiate level seemed unnecessary, even ridiculous to many.¹ In the United States before World War II, only the Eastman School of Music and the Curtis Institute allowed students to major in viola.² Now all music schools offer a major in viola, and all major music schools have at least one viola professor who only teaches viola (and not violin as well). The viola has come a long way from being viewed as an auxiliary instrument to the violin, always secondary, as the study of piccolo is to flutists, or bass clarinet is to clarinetists. It is universally recognized now that the viola is not merely a big violin, and that its technique is different from that of its smaller sibling. No longer do violists have to rely on transcriptions to fill a concert program, as Lionel Tertis, the first real champion of our instrument, did. We have our own unique repertoire now. However, we don't have our own unique pedagogical materials. This is a serious impediment to violists' development, as described briefly in the Preface, and which will be expanded upon in this document.

In order for the viola to complete its evolution from the butt of jokes to the highly respected, beautiful instrument it is, we need a body of pedagogical literature uniquely suited to the demands of our standard literature. Transcriptions of the violin etudes and exercises are a good first step, but they are no longer sufficient. If the point of pedagogical literature is to prepare students to tackle the musical repertoire for their instrument, then the techniques explored in the pedagogical literature need to match those asked for in the repertoire. The viola repertoire is overwhelmingly from the twentieth century, meaning it is often not tonal and demands non-traditional techniques and abilities. The violin pedagogical literature is entirely from the nineteenth century or earlier, meaning it is tonal without exception and

¹ Frédéric Lainé, "Violists of France Unite!" *The Strad* 103 (1992): 331.

² Maurice W. Riley, *The History of the Viola*, vol. 1 (Ann Arbor: Braun-Brumfield, 1980), 184.

necessarily only calls upon traditional techniques and abilities. How violinists are prepared for playing twentieth-century repertoire is outside the scope of this document, but it seems to be largely the same as violinists' preparation: by learning the new techniques through the music itself. In other words, violinists are not prepared for the unique challenges of twentieth-century music either. For violinists this is certainly a problem, but not as much as for violists since the overwhelming majority of standard violin repertoire is from the eighteenth and nineteenth centuries.

The first part of this document will present a brief history of the viola, the purpose of which is to illustrate why we came to adopt the violin pedagogical materials in the first place and why they have continued to have such overwhelming popularity. This history has been described many times in great detail,³ so an in-depth treatment is unnecessary here. The second part of this document will attempt to remedy this problem. It will describe the shortcomings of the traditional pedagogical literature for violists and propose one more suited for our repertoire, with many musical examples. Although we now have a very large catalogue of twentieth- and twenty-first-century works to choose from as violists, this document will confine itself to the most standard works. The point of this document is not to show teachers and students how to prepare for a career as a contemporary music specialist (although that would also be quite valuable). Rather, the point is to illustrate that even for the violist who wants a "traditional" performing career as an orchestral or chamber musician, mastery of twentieth-century music is necessary.

For any orchestra audition in the entire world right now, the required pieces include the Bartók Concerto for Viola and Orchestra,⁴ the Walton Concerto for Viola and Orchestra,⁵ or Hindemith's concerto *Der Schwanendreher*.⁶ It is impossible to get a job in an orchestra without mastering at least one of these works, all of which require fluency with post-tonal language and techniques. Any quartet in the world today will include at least the Bartók Quartets in their standard repertoire, if not many other

³ For example, see Maurice Riley, *History*, vol. 1; Sheila M. Nelson, *The Violin and Viola* (New York: W. W. Norton and Co., 1992).

⁴ Béla Bartók, *Concerto for Viola and Orchestra*, prepared by Tibor Serly, ed. William Primrose (London: Boosey & Hawkes, 1949).

⁵ William Walton, *Concerto for Viola and Orchestra* (Oxford: Oxford University Press, 1993).

⁶ Paul Hindemith, *Der Schwanendreher: Konzert nach alten Volksliedern, für Bratsche und kleines Orchester*. (Mainz: Schott, 1964).

twentieth-century quartets. These works certainly require techniques outside those presented by Kreutzer, Rode, or Flesch. It is unusual to the point of being unheard of that a classical musician will have a professional performing career without at least some degree in music or arts. In order to fulfill the requirements for this degree, a violist will have to give at least one solo recital, among other solo performing requirements (juries, studio recitals, etc.). It would be very difficult as a violist to complete one's entire Bachelor's degree having never played anything written after 1900 (whereas it would be very easy to do this as a violinist, and sadly, it is often done). For these reasons, this document will concern itself with pedagogical materials appropriate for the collegiate level (Bachelor's through doctorate) and how they prepare a student for the standard solo literature for the viola. It is my hope that this document will provide the impetus for the development of more appropriate pedagogical materials which will come to be used by viola professors at music schools across the country as an integral and routine part of their teaching.

PART ONE – A (BRIEF) HISTORY OF THE VIOLA

Chapter 1: The Viola from the Sixteenth to Nineteenth Centuries

“We are an instrument without tradition.”⁷ David Dalton’s iconic book, *Playing the Viola*, begins with this statement by William Primrose, one of history’s greatest violists. “After all,” Primrose continues, “our history of any importance does not precede the advent of Lionel Tertis.”⁸ Tertis lived quite recently, from 1876-1975, but was the first proponent of the viola to have a lasting influence. Of course, the viola does have a very long history, longer maybe than the violin,⁹ but it is not a very illustrious or distinguished one. Indeed, the viola has been the butt of more jokes than perhaps any other instrument and reading statements about the viola and its players made as recently as the 1930s makes it easy to understand why. Writing in 1752, Johann Joachim Quantz said:

The viola is commonly regarded as of little importance in the musical establishment. The reason may well be that it is often played by persons who are either beginners in the ensemble or have no particular gifts with which to distinguish themselves on the violin, or that the instrument yields all too few advantages to its players, so that able people are not easily persuaded to take it up.... So few violists devote as much industry to their work as they should. Many believe that if they only know a little about meter and the division of notes, nothing more can be demanded of them. This prejudice, however, is more than a little detrimental. If they applied the necessary industry, they could easily improve their lot in a large establishment, and gradually advance their position, instead of remaining chained to the viola to the end of their lives, as is usually the case. There are many examples of people who, after playing the viola in their youth, achieved great eminence in the musical world. And afterwards, when already qualified for something better, they were not ashamed to resume the instrument in case of need.¹⁰

Writing about the Paris Conservatoire in the mid-nineteenth century, nearly one hundred years after

Quantz, Hector Berlioz lamented:

It is to be regretted that there is no special class for the Viola. This instrument notwithstanding its relation to the violin, needs individual study and constant practice if it is to be properly played. It is an antique, absurd, and deplorable prejudice that has hitherto handed over the performance of the tenor part to second- or third-rate violinists. Whenever a violinist is mediocre it is said, "He

⁷ David Dalton, *Playing the Viola: Conversations with William Primrose* (Oxford: Oxford University Press, 1988), 1.

⁸ Ibid.

⁹ David D. Boyden and Ann M. Woodward, "Viola," In *Grove Music Online. Oxford Music Online*, <http://www.oxfordmusiconline.com.ezproxy.rice.edu/subscriber/article/grove/music/29438> (accessed September 4, 2012).

¹⁰ Johann Joachim Quantz, *On Playing the Flute*, trans. Edward R. Reilly (New York: Schirmer Books, 1966), 237.

will make a capital tenor.”¹¹

In 1944, nearly one hundred years after Berlioz, violist Louise Rood wrote an article for the Music Teachers National Association Proceedings entitled, “A Plea for Serious Viola Study,” in which she said:

In most of those colleges where applied music is taught, the viola is either omitted from their catalogues or parenthetically included: (Viola, Clarinet, Saxophone or Harp lessons can be arranged)... Generally, the viola is played by students urged “to take it up on the side,” (never in front!) in order to “help out” the orchestra or ensemble group.¹²

From these quotations, it is clear that the viola has a very long history of second-class musical citizenship (at best!). Reading journal articles and other publications that discuss the viola from the early twentieth century (even up to the 1950s, in some cases) is very amusing to present-day violists, but it also clearly shows just how pervasive and long-lived was the perception that the viola and its players were quite inferior. To give the reader of this document a sense of this (and also a good laugh), a representative list of quotes is provided in Appendix 1.

This relative unimportance of the viola would have been shocking to sixteenth- and seventeenth-century musicians, however. String ensemble music at this time routinely included multiple viola parts, with four-part ensemble music generally having two violas and five-part ensemble music having three violas.¹³ To play these different parts, different sized violas were used: a large tenor viola for the lower parts, and a small alto viola for the upper parts.¹⁴ The large tenor violas were very unwieldy, some with body lengths of 47-48cm (18.5-18.9 inches).¹⁵ Today, a very large viola is considered anything over 17 inches, with anything over 17.5 inches being seen as unplayable. Most violists have instruments between 16 and 16¾ inches.¹⁶ The small alto violas, which were the ones that survived intact beyond the

¹¹ *Memoirs of Hector Berlioz from 1803 to 1865, Comprising his Travels in Germany, Italy, Russia, and England*, trans. Rachel Holmes and Eleanor Holmes; annotated and revised by Ernest Newman (New York: Tudor Publishing Co., 1935), 405.

¹² Louise Rood, “A Plea for Serious Viola Study,” *Music Teachers National Association: Volume of Proceedings* 38 (1944): 399.

¹³ Boyden and Woodward, “Viola.”

¹⁴ Ibid.

¹⁵ Ibid.

¹⁶ Lionel Tertis spent the second half of his career promoting his Tertis Model viola, which was 16¾ inches, the size he considered to be the maximum length to be comfortably playable, but also the minimum length to give a satisfactory sound. (Riley, *History*, vol. 1, 246.)

seventeenth century, were too small to give a good sound, especially on the C string.¹⁷ Unlike the other bowed strings, there has never been a standard size viola. Whereas a length of around 35.5cm is the acoustically optimal size for the violin, a viola would have to be about 53cm long to be the right length to give the ideal resonance to its lower tones.¹⁸ Since this would be completely unplayable, violas have always been “too small,” with a rich resonance and tone quality becoming increasingly difficult to achieve the smaller the viola becomes. Because of the abundance of violas made in the sixteenth and seventeenth centuries to serve the need of ensembles requiring multiple viola parts, few violas were made in the eighteenth century, when one viola part, if any, became the standard. Many of the enormous tenors were cut down to a more manageable size and the great violinmakers of the eighteenth century (Stradivarius, Guarneri, etc.) made few, if any, violas.¹⁹

Due to changing musical tastes, the viola was all but forgotten by composers in the eighteenth century. Whereas sixteenth- and seventeenth-century music almost always included multiple viola parts, the most popular genres in the eighteenth century either excluded violas entirely (the trio sonata) or relegated them to an inferior role of merely filling in harmonies or doubling the bass line (the concerto grosso). The trio sonata was the predominant form of chamber music in the eighteenth century and was written for continuo (most typically cello and harpsichord) and two solo treble instruments, which were usually two violins, two oboes, or two flutes. The concerto grosso, the predominant large ensemble form, consisted of a small solo ensemble (usually two violins and cello) and the *ripieno* accompanying ensemble, with first and second violin parts, viola, cello, and continuo. Although the viola was sometimes included in the solo ensemble (see Riley, vol. 1 for a discussion of varied instrumentation in concerti grossi²⁰), the most popular and influential composers of concerti grossi were Corelli and later Vivaldi, neither of whom included parts for solo viola. These two composers, in addition to Tartini, also wrote numerous solo violin concertos, especially Vivaldi. None wrote any viola concertos. Thus, the violin

¹⁷ Riley, *History*, vol. 1, 201.

¹⁸ Boyden and Woodward, "Viola."

¹⁹ Ibid.

²⁰ Riley, *History*, vol. 1, 71-74.

emerged unambiguously as the solo instrument of the string family while the viola was left behind. It's understandable, then, why the only people who came to play the viola were the least talented musicians: the music written for the instrument was easy and dull and anyone with any ambition set their sights on the violin or another instrument that provided more rewards and challenges.

There are exceptions to this, of course. Telemann wrote many works featuring the viola, his Concerto in G major from 1731 and his Concerto for Two Violas being the most famous. Bach, himself a violist, also gave the viola more prominent and gratifying parts in two of his Brandenburg Concertos. In the Third Brandenburg Concerto, the ensemble is made up of three violins, three violas, three cellos and continuo. Each player is both soloist and part of the *ripieno* ensemble, with the first violin and the first viola especially featured. In the Sixth Brandenburg Concerto, the soloists are two violists, with the *ripieno* consisting of two violas da gamba, cello, and continuo. Contemporary scholarly research has discovered many more hitherto unknown works featuring the viola, especially those of Telemann,²¹ but the repertoire is still greatly impoverished compared to those works written to feature the violin.

In the second half of the eighteenth century, the viola started to get more recognition from composers. In their quartets, Mozart and Haydn wrote interesting and independent parts for the viola, occasionally giving it solo lines. Because of the importance of melody and bass in music from this era, however, the viola never achieved the status of the violin or even the cello, at least in string quartet writing. Despite this, Mozart (among many other composers throughout music history) preferred to play viola in chamber music and wrote some of the first masterpieces that feature the viola. Riley suggests that this preference started out of necessity: as piano and composition demanded more and more of his energy, he did not have the time to keep his violin playing at a high enough level and so would choose the (easier) viola in playing chamber music.²² However, it seems natural (to violists) that composers would choose the viola over other instruments in playing chamber music: the viola often has the most interesting part harmonically and its physical place in the ensemble enables the player to hear all the other voices easily,

²¹ Ibid., 117-118.

²² Ibid., 130.

something that seems likely to be of especial interest to a composer. In the realm of chamber music, Mozart's Divertimento in Eb major for string trio, K. 563 gives equal, and very difficult, parts to all three instruments. In his "Kegelstatt" Trio in Eb major for viola, clarinet, and piano, K. 498, Mozart gives the viola a soloistic role, equal to the clarinet and piano. In string quintets, Mozart favored the instrumentation with two violins, two violas, and cello, writing six works for this ensemble (the final two being the most famous). And finally there is the work for which violists are eternally grateful to Mozart, the incomparable Sinfonia Concertante in Eb major, K. 364 for violin and viola solo with orchestra. In this work, the violin and viola are treated as true equals, playing the exact same material. Although today this work is a cherished part of our standard repertoire and often performed, it was forgotten for many, many years, probably because the viola part was far beyond the capabilities of violists at the time. When Lionel Tertis performed it with Fritz Kreisler in 1924, he reports that

the newspapers came out with such phrases as: "Mozart's rarely heard Concertante... containing some of Mozart's most superlative music", "This little-known work", "These men played a practically unknown Concertante of Mozart."²³

In addition to Mozart, the Stamitz brothers, Karl (1746-1801) and Anton (1754-1809?), were viola soloists and did much to promote the viola during their lives. Raised and educated in Mannheim, they traveled to Paris, where they performed as viola soloists (Karl also went to London and Russia to spread his viola virtuosity). Both wrote several viola concertos and other works featuring the viola and were highly praised for their compositions and playing ability.²⁴ Not all of their works are readily available in modern editions, but Karl Stamitz's first concerto, Concerto in D major for Viola and Orchestra, is a standard part of the repertoire today, especially in Europe where it is often the only piece asked for in the first round of professional orchestral auditions. The other standard concerto from this period (and the only other one asked for in professional auditions in Europe) is the Concerto in D major for Viola and Orchestra by Franz-Anton Hoffmeister (1754-1812), a contemporary of the Stamitz brothers, who lived in Vienna.

²³ Lionel Tertis, *My Viola and I: A Complete Biography* (London: Elek Books Limited, 1974), 33.

²⁴ Riley, *History*, vol. 1, 119-121.

Despite this new recognition of the viola's potential, the tradition of incompetent viola players continued. Recent scholarship has uncovered many other late eighteenth-century and early nineteenth-century works that feature the viola,²⁵ but apparently the increased supply of music that might entice a musician to become a violist was either unknown at the time it was written or wasn't enough to attract players to the instrument. In 1869, Richard Wagner voiced a complaint about orchestral violists that is very similar to what Quantz had to say, more than a century before him:

The viola is commonly (with rare exceptions indeed) played by infirm violinists, or by decrepit players of wind instruments who happen to have been acquainted with a stringed instrument once upon a time: at best a competent viola player occupies the first desk, so that he may play the occasional soli for that instrument; but I have seen this function performed by the leader of the first violins. It was pointed out to me that in a large orchestra, which contained eight violas, there was only one player who could deal with the rather difficult passages in one of my later scores!²⁶

In the world of orchestral writing, composers in the nineteenth century became increasingly interested in the unique tone color of the viola and began featuring it and writing more interesting parts for it to play. However, violists in those days played very small instruments, the alto violas from the sixteenth century, whose C string resonance left much to be desired.²⁷ Composers were writing for violas that had full, dark tones with rich resonance and for violists that had a confident command of their technique. Violists of this caliber were very scarce indeed, hence Wagner's complaint. It seems, then, that the composers were the strongest driving force behind the improvement of both viola technique and the instruments themselves. As composers began writing more difficult and important parts for the inner voices and demanded a rich, full sonority from the violas, it became apparent that there was a pressing need for violists with a high(er) level of technical ability who played instruments large enough to have the desired resonance.

One of the defining characteristics of the Romantic orchestral sound from this era is the increased importance placed on the middle and lower sonorities, giving the sound a lusciousness not heard in earlier symphonic music. As early as 1808, Méhul had omitted the violins entirely in his opera *Uthal*, although this early experiment was considered a failure. Upon hearing this opera for the first time, the composer

²⁵ Riley, *History*, vol. 1, 196-199.

²⁶ Richard Wagner, *On Conducting*, trans. Edward Dannreuther (Cirencester, England: The Echo Library, 2005), 6.

²⁷ Riley, *History*, vol. 1, 201.

Grétry reportedly said, “I should give a Louis d’or to hear a chanterelle [violin E string],” with Berlioz adding:

This [viola] quality which is so precious when judiciously used and cleverly contrasted with the tone of the violins and other instruments, will soon pall. It is too little varied and bears too much the character of sadness to do otherwise.²⁸

Beethoven’s monumental Ninth Symphony also gave considerably more prominence to the lower voices, most notably in starting his famous “Ode to Joy” theme with just cellos and basses, joined later by the violas and gradually adding in the higher voices in the orchestra. Berlioz, an orchestrational innovator, frequently gave the violas prominent melodic lines (for example, in his *Roman Carnival Overture* or his overture to *Benvenuto Cellini*). Wagner, Tchaikovsky, Mussorgsky, and finally Richard Strauss all wrote progressively more difficult and prominent viola parts, necessitating improved technical (and musical) abilities among orchestra violists. In chamber music, too, composers were increasingly giving the viola a more equal voice in the ensemble. Beethoven, Schubert, Schumann, and Brahms all gave the viola prominent lines in their chamber works, often featuring them as soloists. Later in the nineteenth century, Dvorak and Smetana famously opened their quartets with viola solos.

Solo music for the viola, however, is relatively scarce in the nineteenth century, especially compared to that for violin or even cello. The most notable exception is Berlioz’s *Harold in Italy*, commissioned by Paganini, who famously refused to perform it because it didn’t feature him enough.²⁹ It is significant that the only Romantic concerto we have as violists is less a concerto and more a symphony with solo viola obbligato, written at the request of a famous violinist. Three other important and standard sonatas from this era are, of course, transcriptions of works from other instruments: Schubert’s “Arpeggione Sonata” (for the now-obsolete string instrument, the arpeggione) and Brahms’ two sonatas opp. 120, originally for clarinet. Given the enormous repertoire of solo violin music from the nineteenth century, those contributions to the viola repertoire that exist (Schumann’s *Märchenbilder*, three pieces by Vieuxtemps, Weber’s *Andante and Hungarian Rondo*, and a smattering of other minor pieces) seem very

²⁸ Berlioz’s *Orchestration Treatise: A Translation and Commentary*, trans. Hugh Macdonald (New York: Cambridge University Press, 2002), 40.

²⁹ Riley, *History*, vol.1, 192.

meager indeed. Violist and scholar Ulrich Drüner gives a possible reason for this: the increased popularity of music among the middle class resulted in larger audiences at concerts, which necessitated larger performing spaces. He argues that

the very small violas used by soloists during the eighteenth century could not prevail acoustically, especially against the symphonic sound of the Romantic orchestra. This explains the gradual disappearance of the viola from the solo repertoire from 1830 on, and around 1850 even in chamber music the viola parts look rather uninteresting.³⁰

³⁰ Ulrich Drüner, "The Viola Etude: A Survey of its History and its Problems," *The Viola: Yearbook of the International Viola Research Society* Vol. 2, (1981): 56.

Chapter 2: The Paris Conservatoire

The emergence of the viola as a respected instrument in its own right can be clearly seen through the development of viola instruction in the nineteenth and early twentieth centuries at the Paris Conservatoire, the first major conservatory where students could choose to study viola as their principal instrument. Peter Neubert has written an excellent dissertation on the development of the viola class at the Paris Conservatoire, and it is largely from this work that the following information is taken.³¹ The Conservatoire opened in 1795, but did not offer viola as a major instrument until 1894. In contrast, it was possible to major in the double bass (another instrument with traditionally very little solo music) as early as 1827.³² The Paris Conservatoire quickly reached a very high standard of excellence and by the 1830s, “the reputation of violin instruction and performance at the Conservatoire had become the envy of Europe.”³³ Because they set the standard to which other music schools aspired, the faculty was understandably rather reluctant to add additional instrumental classes unless they could be sure these new instrumentalists could achieve this same level of excellence. Given the poor reputation of violists in this era, it is not surprising that they were averse to adding a class for them.³⁴

The first step towards creating a viola class was perhaps the chamber music class started in the late 1840s.³⁵ Chamber music societies were extremely popular and numerous in Paris starting in the 1830s and continuing into the early twentieth century. Obviously, none of the violists who played in either the Conservatoire chamber music class or the chamber music societies had formally studied the viola at the Conservatoire, since this was not possible until the late 1890s. These violists were either former violinists or they played both instruments, treating the viola as an auxiliary instrument much like the contrabassoon

³¹ Peter Neubert, “The Development of Viola Instruction at the Paris Conservatoire During the Nineteenth Century and the Evolution of an Idiomatic Style of Writing for the Viola as Seen through the Music of the Viola *Concours*, 1896-1918” (Doctoral dissertation, University of Kentucky, 2004), ProQuest (908174046).

³² Ibid., 4

³³ Ibid., 44.

³⁴ Ibid., 45.

³⁵ Ibid., 5

is treated by bassoonists today. Some turned to viola out of preference, others for economic reasons.³⁶

Whatever the reason, the demands of chamber music and the fact that there is only one player on a part meant that inferior violists could not hide in the background as they could in an orchestra, helping to raise the standard of viola playing. Several of these professional violists were quite good, even by today's standards, with one of the most famous being the viola virtuoso Chrétien Urhan. However, this small handful of accomplished, successful violists was not enough to overcome the long-held prejudice against the instrument.

A viola class was first proposed at the Conservatoire in 1870 and the reactions to this are very illuminating. Critic Arthur Pougin published this opinion in *Le Ménestrel* on July 17, 1870:

What would be the point of a viola class? Because, for the information of any of the members of the commission who may not be aware of the fact, it must be said that the technique of the viola is in no way different from that of the violin.... All violinists play the viola without being aware of it...and when they chance to have one in their hand they know how to play it.³⁷

This quotation clearly shows how many viewed the viola at the time: as a big violin, no different in playing technique. For reasons that are unclear, the viola class was not established at the Paris Conservatoire in 1870 as proposed, although two important preparatory schools for the Conservatoire did establish viola classes around this time (in Dijon and Marseille), as did the Conservatoire Royal de Bruxelles.³⁸ Two more attempts were made to establish a viola class at the Paris Conservatoire, in 1878 and 1892, before this was finally achieved in 1894. In 1892, the commission in charge of developing the viola class issued the following statement, justifying the development of a viola class:

With modern instrumentation having developed greater complexity and more nuance along with a growing taste for picturesque effects requiring the use of new timbres and assigning instruments that had previously been considered auxiliary or subordinate an important expressive role, the creation of viola and saxophone classes seems to have been preordained.³⁹

It is interesting to note that the saxophone had only been invented in 1846, less than fifty years before establishing a saxophone class at the Conservatoire was proposed. Contrast this with the long history of

³⁶ Ibid., 31-33.

³⁷ Laine, *Violists*, 331.

³⁸ Neubert, *Development of Viola Instruction*, 6, 65-66.

³⁹ Ibid., 69

the viola, dating back to the sixteenth century.

When the viola class was finally established, its first teacher was Théophile Laforge, principal violist of the Société des Concerts and the Opéra, and therefore a very well-established and respected musician. In the twenty-four years since a viola class was first proposed at the Conservatoire, very little had changed in the minds of more conservative members of musical society, however. Monsieur Pougin reiterated his opinion in 1894, writing:

What is the use of a viola class? Are we also likely to create a class for piccolo, which would be justified simply because it was smaller than the flute? That seems to me to be just as useless. [...] And long live the viola class, which will never be anything other than a second choice for those young people who may have had difficulty with the entrance examination for the violin class.⁴⁰

Pougin even went on to say that M. Laforge would have preferred to have a violin class, since he was a former violinist.⁴¹ It is to Théophile Laforge's credit that the first viola class was, in fact, quite successful and during his tenure there gained a reputation equal to that of the violin and cello classes.⁴²

Although Pougin was overly pessimistic and quite conservative in his views, it is worth considering the "violinistic" bent of Laforge's viola class at the Paris Conservatoire. Laforge was necessarily trained as a violinist at the Conservatoire and graduated with distinction. He joined the Opéra as a violinist after graduation, although he quickly made the transition to viola, achieving his principal positions in the Société des Concerts and the Opéra in 1887, a year after he had joined the Opéra as a violinist. Unlike other professional violists at the time, however, he continued to perform regularly as a violinist as well.⁴³ In fact, he thought that playing both was a necessity, as evidenced in the following passage from an article he wrote on the viola:

The viola is an instrument a little bit larger than the violin and it is held under the chin like the violin. This instrument should be played by violinists, as it is always necessary to begin playing the violin before taking up the viola. Nevertheless, one can begin on the viola, but the labor will be more difficult and the musician in question will possess a poor level of virtuosity.⁴⁴

⁴⁰ Laine, *Violists*, 332.

⁴¹ Neubert, *Development of Viola Instruction*, 72.

⁴² Ibid.

⁴³ Ibid., 75.

⁴⁴ Théophile Laforge, "L'Alto," in *Encyclopédie de la Musique et Dictionnaire du Conservatoire*, Pt. II, ed. Albert Lavignac (Paris: Librairie Delagrave, 1927), 1838, translated by Neubert, *Development of Viola Instruction*, 77.

He also advocated playing on a very small viola of approximately 15¾ inches, which was the “official” Conservatoire viola size, saying this size was more practical and advantageous because it was closer in size to the violin (which is 14 inches).⁴⁵ He went on to explain that the sonority of the viola should be closer to that of a violin, not that of a cello, “as is so often wrongly believed.”⁴⁶ As far as the differences in playing the two instruments, he apparently thought there were very few:

The technique of this instrument is the same as that of the violin; one needs only slightly greater force, that is to say more pressure of the bow on the string as well as more pressure from the left hand pushing the fingers firmly on the strings, in order to obtain complete fullness of sound.⁴⁷

For the first ten years the viola was offered as a major at the Conservatoire, it was common for students who had previously been violin majors to subsequently enter the viola class. Only after 1905 did this become less usual. The repertoire performed by these students at their annual exams was also dominated by transcriptions of violin pieces during the first three years. However, over time, the number of original viola works grew, although the pieces commissioned for performance had a definite violinistic bent during Laforge’s time at the Conservatoire.⁴⁸ One of the most popular was the *Morceau de Concert* by Léon Honnoré, which is no longer performed today (like most of the commissioned pieces).⁴⁹ In fact, only two of these pieces even exist in modern editions: the *Appassionato* by Henri Büsser and the *Concertstück* by Georges Enesco. The Enesco is the only piece that is still widely played, however.⁵⁰

Given the stature of the Paris Conservatoire at the time, the influence and impact of Théophile Laforge and his viola class is quite significant. He held this position for twenty-four years, until 1918. Despite this, it is his student, Maurice Vieux, who is considered the founder of the modern French viola school.⁵¹ Maurice Vieux took over the viola studio at the Conservatoire in 1918 when Laforge left and taught there for thirty-three years. He stressed the development of a technique equal to that of violinists, and wrote his own set of twenty etudes, each dedicated to a former student. Many of his students enjoyed

⁴⁵ Neubert, *Development of Viola Instruction*, 78.

⁴⁶ Laforge, “L’Alto,” 1839, translated by Neubert, 78.

⁴⁷ Laforge, “L’Alto,” 1839, translated by Neubert, 79.

⁴⁸ Neubert, 81-82, 147.

⁴⁹ *Ibid.*, 122-123.

⁵⁰ *Ibid.*, 131.

⁵¹ *Ibid.*, 156.

significant careers, including Serge Collot, Paul Hadjaje, and Pierre Pasquier.⁵² For American violists, the most significant of Laforge's students was Louis Bailly, a former violinist, who moved to the United States in the 1920s and in 1925 became the first viola professor at the Curtis Institute in Philadelphia, only the second American music school to offer viola as a major instrument.⁵³

The late nineteenth century, therefore, marked a turning point in the statue of the viola. As will be described in the next chapter, the early twentieth century was the most important era in our history for the establishment of the viola as an instrument equal to the violin. It is impossible to say if this reversal would have occurred without the influence of the Paris Conservatoire, but a variety of influences coming from different countries simultaneously, as described below, was finally enough to propel violists to a higher level of playing and respect amongst musicians.

⁵² Ibid., 155.

⁵³ Ibid., 191.

Chapter 3: The Modern History of the Viola

After languishing for so long as an instrument only fit for those who were too old or hopeless in their lack of abilities to play anything else, in the early twentieth century, the viola finally began to be recognized for the beautiful instrument it is. British violist Lionel Tertis (1876-1975) is widely credited as being the first viola soloist to have lasting impact and stature. He was immeasurably important in helping establish the viola as an instrument worthy of study and also in substantially increasing our repertoire. Next to him stands William Primrose (1904-1982), one of the greatest violists in history, and Paul Hindemith (1895-1963), who as both a violist and a composer helped elevate the viola to the position it enjoys today. There are many other great violists from this era (Frederick Riddle, Paul Doktor, Lillian Fuchs, just to name a few), but it is well beyond the scope of this document to discuss all of them.

Lionel Tertis began on the violin, of course, but took up the viola at age nineteen because a friend at the Royal Academy of Music in London wanted to form a string quartet and there weren't any viola students at the Academy.⁵⁴ He continued to play viola in school, and after a fellow student gave him a Guaragnini viola to play (a much better instrument than his first viola!), he decided that his "life's work should be the establishment of the viola's rights as a solo instrument."⁵⁵ His tenacity in this aim is evident throughout his life and, even as a student, he was not at all shy about challenging long-held opinions about the instrument. He writes,

When I first began to play the viola as a solo instrument, prejudice and storms of abuse were my lot. The consensus of opinion then was that the viola had no right to be heard in solos, indeed the consideration of its place in the string family was of the scantiest. It was not only a despised instrument, but its cause was far from helped by the down-and-out violinists who usually played it. The executants in those days were violinists too inferior to gain a position in orchestras as such. A wretchedly low standard of viola-playing was in fact accepted simply and solely because there was no alternative. A little old man, said to be a professional viola-player, was engaged by the Academy to take part twice a week in the orchestral practices. What a player he was! He used a very small instrument, not worthy of the name viola, and he produced from it as ugly a sound as fiddle ever emitted – a bone-dry tone, absolutely devoid of vibrato, which made one's hair stand on end. I once enquired of [the Principal of the Academy]: "Could we not dispense with this horrible player?" His reply was, "No, he is a necessary evil."⁵⁶

⁵⁴ Tertis, *My Viola*, 15.

⁵⁵ *Ibid.*, 17-18.

⁵⁶ *Ibid.*, 16.

He goes on to describe what people thought were the limits of the viola's range and the abilities of its players:

In those days when it was the rarest thing to hear a viola solo, the upper range of the instrument was completely unexplored. Players of that time rarely climbed higher than the second ledger line in the treble clef! To counter this neglect of the higher registers I resolved to give demonstrations to show the improvement in the quality of those higher tones that could be achieved by persistent practice in them. As a student at the [Royal Academy of Music] I was able to accomplish this by playing the Mendelssohn and Wieniawski D minor concertos (of course a fifth lower but exactly as written for the violin) at two of the fortnightly students' concerts there. The morning after my performance of the Mendelssohn, I met Alfred Gibson who was for a time the violist of the Joachim Quartet. Evidently, he had been present at the concert for he greeted me with a menacing look and exploded: "I suppose the next thing is, you will be playing behind the bridge! The viola is not meant to be played high up – that is the pig department!"⁵⁷

Early in his career, Tertis taught viola at the Academy and worked as an orchestral musician (at first as a violinist), but he spent most of his career as a viola soloist, working tirelessly and against great odds to promote the viola as a solo instrument. He "begged for viola compositions from the younger English composers"⁵⁸ and made transcriptions of many violin and cello works for the viola, including the Bach *Chaconne* for solo violin and the Elgar Concerto for Cello and Orchestra. Many of the works written for him are only occasionally played today outside of England. The exception to this is the William Walton's Concerto for Viola and Orchestra, which has become one of our most standard works. Ironically, Tertis declined to play this concerto for many years and the piece was premiered by Paul Hindemith instead. In his autobiography, Tertis explains why he initially turned down what has become one of the greatest contributions to our repertoire:

With shame and contrition I admit that when the composer offered me the first performance I declined it. I was unwell at the time; but what is also true is that I had not learnt to appreciate Walton's style. The innovations in his musical language, which now seem so logical and so truly in the main-stream of music, then struck me as far-fetched. It took me awhile to realize what a tower of strength in the literature is this concerto...⁵⁹

Tertis' artistry was universally acknowledged and he frequently performed with Fritz Kreisler, Pablo Casals, and numerous other great musicians of his generation. On the occasion of his eighty-fifth birthday, he received a birthday letter from William Walton that expresses how far-reaching was his

⁵⁷ Ibid., 18.

⁵⁸ Ibid., 33.

⁵⁹ Ibid., 36.

influence and the high esteem in which he was held:

I should like to pay tribute to your genius, not only as a superlative virtuoso on the viola, but also for having elevated that somewhat despised and neglected instrument to the high position it now holds, largely through your teaching and guidance, and I doubt if there is a violist present who has not benefited by your inspired example and musical integrity.⁶⁰

In addition to dedicating his life to making the viola a recognized solo instrument, Tertis was also tireless in his promotion of his Tertis model viola, which he designed after retiring from playing (for the first time) in 1937. Up to this point, Tertis had performed on an enormous Montagnana viola of 17 1/8 inches, the size of which likely contributed to the physical difficulties he began to experience, hastening his early retirement.⁶¹ The Tertis model viola had a length of 16¾ inches, which Tertis considered to be the maximum size for ease of playing, but also the minimum size for a good viola sound, especially on the C string.⁶² He was adamant in his dislike of small violas, which were very popular in his day (and advocated by the Paris Conservatoire, as described above), and made a point of promoting larger violas wherever he was:

I railed most vehemently against the small so-called violas in use, to the exasperation of violin dealers; I did this whenever the opportunity offered – to such an extent that as a result of my tirades, to my satisfaction the dealers had difficulty in disposing of their small instrument which were neither violin nor viola.⁶³

Even today, when much more attention is paid to ease of playing and injury prevention, violists are encouraged to play on the biggest viola they can manage without hurting themselves. Today only the tallest players play on instruments of 16¾ inches or larger, and only the smallest players play on instruments under 16 inches. Given the preferences of the Paris Conservatoire and Théophile Laforge for small violas and Tertis's crusade to end their use, it seems that perhaps a large part of the reason why the viola was looked down upon for so long is that the instruments themselves were of very poor quality with considerably less than desirable resonance and depth of tone. Couple bad instruments with bad players and its no wonder the viola had the reputation it did.

⁶⁰ Ibid., 118.

⁶¹ Ibid., 81-83.

⁶² Riley, *History*, vol. 1, 246.

⁶³ Tertis, *My Viola*, 50.

Just as Tertis began his performing career as an orchestral violinist, William Primrose also began his career as a violinist. He studied violin at Guildhall in London and then later with the great violinist Ysaÿe, who was a defining influence and encouraged him to pursue the viola. Like Tertis, his early career was not as a soloist, but as a chamber musician (in the London String Quartet) and orchestral violist (in the NBC Symphony under Toscanini).⁶⁴ He began his solo career in 1942 and

By the conclusion of World War II in 1945, the name Primrose had become a household word in music circles. Just as the names Kreisler and Heifetz had become synonymous with the word *violin*, so the name Primrose became synonymous with the word *viola*. Primrose was recognized as the dean of all living violists.⁶⁵

As a soloist, he had a famously astounding technique and great charisma. In his eulogy at Primrose's funeral, his student and first curator of the Primrose International Viola Archive, David Dalton recalled the following:

One older and highly respected European violist told me that "Primrose's early recordings of two Paganini caprices hit our shores like a tidal wave, sweeping aside for ever past notions of what limitations the viola was supposed to have." Yes, Primrose's standards were both unassailable and unattainable.⁶⁶

Although Tertis was the first great viola soloist and paved the way for Primrose and later violists, it is Primrose who has had the largest impact. Many of the works written for him are a part of our standard repertoire now, most notably Bartók's Concerto for Viola and Orchestra, which Bartók didn't live to see performed (or even completed). Nearly every violist learns this piece, and it is the one most frequently played at professional orchestral auditions. In contrast, as mentioned earlier, many of the pieces written for Tertis have ceased to be performed. Primrose himself explains why the music written for Tertis has fallen by the wayside:

By the time Tertis was in his fourth decade, a positive bonanza of contemporary music was to his hand. But here was the rub. Like Casals he had little patience with and little understanding of modern music...we should not forget that Tertis initially disdained the Walton Concerto; and for the works of Paul Hindemith he had no time at all, and didn't even give them short shrift. He gave them no shrift at all.⁶⁷

⁶⁴ Riley, *History*, vol. 1, 281.

⁶⁵ Ibid., 283.

⁶⁶ Dalton, *Conversations*, 236.

⁶⁷ Ibid., 2.

So, as forward looking as Tertis was in his advocacy for the viola and its appropriate size, he was old-fashioned in his musical tastes, and the music written for him has largely not stood the test of time.

In addition to being a world famous performer, Primrose was also an active teacher throughout the United States, as well as in Canada and in Tokyo. He joined the faculty at the Curtis Institute of Music in 1942 and continued to teach for the rest of his life at many institutions, including Juilliard, the University of Southern California, Indiana University, the Tokyo University of Fine Arts, and finally at Brigham Young University, where he taught until his death in 1982.⁶⁸ He also made his own editions of many solo works, etudes, and his own transcriptions, all of which feature his idiosyncratic fingerings. These make frequent use of open strings and harmonics, which he believed brought out the beauty of the viola tone.⁶⁹ His influence on subsequent generations of violists cannot be underestimated; it is likely that every professional violist performing today as well as every student of the viola has benefited from his teaching either directly (in the case of former students) or indirectly (as his “grand”- or “great-grand”-students).

The final defining influence on contemporary viola playing comes from German violist and composer Paul Hindemith. As mentioned previously, Hindemith gave the premiere of the Walton concerto when Tertis turned it down. Although he was recognized as one of the world’s premiere viola virtuosos by 1930, his greatest contributions to the instrument are his ten solo viola works.⁷⁰ Of the three works for viola and orchestra, *Der Schwanendreher* joins the Walton concerto and the Bartók concerto as one of the three most frequently studied and performed viola concertos. Of his sonatas, Sonata for Viola and Piano op. 11, no. 4⁷¹ and Sonata for Solo Viola op. 25, no. 1⁷² are studied by nearly every violist and are favorite recital works. The other five sonatas (two with piano, three unaccompanied) and two other pieces for viola and orchestra are somewhat less standard, but are still studied and performed regularly. It would be impossible as a violist to complete a Bachelor’s degree without studying at least one work by

⁶⁸ Riley, *History*, vol. 1, 288.

⁶⁹ Dalton, *Conversations*, 114.

⁷⁰ Riley, *History*, vol. 1, 269-70.

⁷¹ Paul Hindemith, *Sonata for Viola and Piano* op. 11, no. 4 (Mainz, Germany: Schott, 1950).

⁷² Paul Hindemith, *Sonata for Solo Viola* op. 25, no. 1 (Mainz, Germany: Schott, 1951).

Hindemith, and most students study several over the course of their education.

The importance of the first half of the twentieth century to the establishment of the viola as an instrument worthy of study and admiration cannot be emphasized enough. In Paris, England, Germany, and the United States, a convergence of circumstances and personalities came together to effect a worldwide change in the position of the viola in the eyes of audience members and other musicians. Despite this, the establishment of viola study at conservatories in the United States was quite slow. The Eastman School of Music in Rochester, New York was the first to offer viola as a major instrument in 1921. Its first teacher, Samuel Belov, was able to “build up the viola department until it became one of the most prestigious schools for violists in the world.”⁷³ The Curtis Institute followed in 1925, hiring Louis Bailly from Théophile Laforge’s first viola class at the Paris Conservatoire. Other schools, however, were slow to hire viola professors. David Dalton recalls violist Louis Kievman, lamenting the lack of viola instruction at the Juilliard School before World War II, saying,

As Louis Kievman, the violist, tells it “All we violinists were required to learn the viola. The only trouble was that Juilliard, if you can believe it, didn’t have a viola instructor. We simply had to do it on our own.”⁷⁴

It wasn’t until after World War II that most music schools offered viola as a major instrument, and this is only because most major schools hired a permanent string quartet-in-residence and the violist of the quartet was appointed as Professor of Viola. This, of course, necessitated offering the viola as a major instrument and the development of a course of study for violists.⁷⁵ Before considering how this course of study was determined, it is necessarily to present a brief history of violin and viola pedagogical materials.

⁷³ Riley, *History*, vol. 1, 294-5.

⁷⁴ Dalton, *Conversations*, 12; When asked if he supported violinists being made to take mandatory viola lessons, Primrose responded, “Well, it purifies their souls.” (Ibid.)

⁷⁵ Riley, *History*, vol. 1, 300.

Chapter 4: A Selective History of Pedagogical Materials for the Violin and Viola

Today, most viola professors in the United States use transcriptions of the major violin pedagogical materials in their studios. Students typically work from the Flesch and/or Galamian scale books, Schradieck and/or Sevcik exercises, and play etudes by Mazas, Kreutzer, Dont, and Rode. These are sometimes supplemented with additional pedagogical material, with Campagnoli *Caprices* and the *Studies*, *Etudes*, and *Caprices* by Lillian Fuchs being the most common. These latter materials have the distinction of having been originally written for the viola. Most violists don't realize that there is actually a large body of pedagogical material written specifically for the viola from the nineteenth century, mostly because it was (or, in some cases, still is) out of print and very difficult to obtain.

Before 1800, the etude and study books written specifically for the viola were mostly designed to help accustom violinists to reading alto clef. These methods, by Corette (1782), Woldemar (1795), and Cupis (1799) are very short and make no distinction between violin and viola regarding technique or method of playing, other than that the two instruments read different clefs.⁷⁶ Given the general opinion of the viola at that point in history and its musical role, it is not surprising that there are no viola methods that help develop a player's technique. It went without saying that anyone playing the viola would also play the violin and so would acquire their technique on that instrument, if that was their aim. In his dissertation on etudes and methods written for the viola between 1780 and 1860, Steven Lewis Kruse notes that, "none of these methods poses technical problems equal to those found in violin studies and methods of the same period."⁷⁷ The studies to which he alludes include some of the most famous and widely used studies today, including those by Kreutzer, Fiorillo, Rode, and Gaviniès. Every violinist and violist today knows these names and has played these etudes, in striking contrast to the methods for viola, which have been all but forgotten. The disparity in difficulty between the violin and viola etudes is similarly quite large, underscoring what contemporary observers had to say about the viola and the abilities needed to play it.

⁷⁶ Drüner, *The Viola Etude*, 55.

⁷⁷ Steven Lewis Kruse, "The Viola School of Technique: Etudes and Methods Written Between 1780 and 1860" (Doctoral dissertation, Ball State University, 1985), 117, ProQuest (8518670).

Because of the quantity of chamber music that was written starting in the late eighteenth century and the increasing difficulty and importance of the viola parts, studies began to be published for the viola that were true etudes and provided greater technical challenges. These include studies by Schneider (1802), Hoffmeister (1803), Campagnoli (1805), Cartier (around 1806), Alessandro and Antonio Rolla, and Bruni (1811).⁷⁸ Ulrich Drüner says of these etudes:

...they are not aimed at technical problems mainly, but on the musical understanding of the viola....As the viola literature continued to depend on the violin technique, the studies lack discernible progressive pedagogic guidelines, but rather prove the increased need to transfer the already developed violinistic technique to the viola in a more thorough way and to consolidate it musically and with respect to the different sound on the lower instrument. For this reason, many studies of this time look rather like pieces meant for recital.⁷⁹

Of the etudes from this era, the Campagnoli *Caprices* are still widely used in collegiate teaching, and the Bruni and Hoffmeister etudes are sometimes used as well. These are always used as a supplement to the transcriptions of the violin etudes, however.

The second quarter of the nineteenth century began the age of the virtuoso, first with violinist and composer Nicolò Paganini and later with pianist and composer Franz Liszt. Paganini's famous 24 *Caprices* are occasionally played on viola, but often are considered too difficult due to the many wide stretches and leaps.⁸⁰ Despite the ill-repute still attached to the viola, the allure of the virtuoso can be seen in some of the viola etudes published from this era. The "most famous" (in quotes because it is hardly known today) are the *Préludes* by the mysterious Casimir-Ney. For many years, the actual identity of Casimir-Ney was unknown (this being a pen name), but he has been revealed to be Louis-Casimir Escoffier (1801-1877), an important French viola virtuoso.⁸¹ These *Préludes* are extremely difficult and definitely would not help a violist learn technique – a highly developed technique is needed to even attempt them. Drüner notes that the technical demands of these works make them nearly impossible on a

⁷⁸ Drüner, *The Viola Etude*, 55.

⁷⁹ Ibid.

⁸⁰ Of the Paganini Caprices, Primrose (who played them exceptionally well) said, "If the violist has the technique to perform those flabbergastings, let him go to it. They are lots of fun and make him feel superior. If not, he must adopt a high-minded posture and imply that never, never would he stoop to conquer by such meretricious folly." Dalton, *Conversations*, 185.

⁸¹ Maurice W. Riley, *The History of the Viola*, vol. 2 (Ann Arbor: Braun-Brumfield, 1991), 146.

modern viola of standard size since they were written for a very small viola, hardly bigger than a violin.⁸²

Between 1840 and 1870, there is a marked dearth of viola studies, contrasted with the almost 500 viola studies written between 1870 and 1900.⁸³ This reversal is astounding (especially to modern-day violists who know nearly nothing of these 500 studies). Drüner notes that for the first time, these materials take into account a unique technique for the viola, one more appropriate for larger violas that avoids extremely high positions and wide double-stops, like tenths or fingered-octaves in the lower positions. They address the issues that violists would confront in the orchestral literature: sound and melody, facility with passage work, and idiomatic arpeggios and chords.⁸⁴ One would think that the composers of the most popular of these methods, Hofmann, Meyer, Naumann, Ritter, Weinreich, among others, would be as familiar to violists today as are Kreutzer, Flesch, and Dont, if not more so. However, these names are just as meaningless to a contemporary violist, at least in the United States, as to a non-musician reading this list. Drüner notes that after World War I, this vast library of pedagogical materials specifically for the viola was no longer in use, with publishers issuing new editions of the older studies by Bruni, Campagnoli, and Hoffmeister.⁸⁵ Why would this be the case? Maurice Riley points out that at this time, most of the viola teaching was done by violinists, or at least former violinists who had learned their technique through the etudes of Mazas, Kreutzer, Rode, Fiorillo, and the other standard violin books.⁸⁶ Since this is what they knew best, this is what they used with their students, which meant few people were purchasing the viola methods, and so the publishers stopped publishing this new literature because it hadn't proved popular or lucrative; it was far easier to re-issue the classic violin studies in editions for the viola. The first pages of these widely used methods sometimes still include a humorously antiquated preface to this effect. As an example, the Foreword to the viola edition (published in 1942) of the Flesch scale system, used by nearly every violist at some point in his or her education, reads:

Until comparatively recent times very little had been written for the viola as a solo instrument.

⁸² Drüner, *The Viola Etude*, 56

⁸³ Ibid.

⁸⁴ Ibid.

⁸⁵ Ibid., 57.

⁸⁶ Riley, *History*, vol. 1, 183.

Our contemporary composers have done a great deal to remedy this situation....This new literature has placed new demands upon the violist, who in the past found a place only as an orchestra or chamber music player. Higher standards of technical perfection are required.⁸⁷

As Drüner says, the widespread use of transcriptions of violin methods is “the path of least resistance” and it helps explain why this state of affairs continues today.⁸⁸ Tradition is very powerful and long-lasting, and the pedagogical tradition of the viola is very short, at least in terms of the standards of technical proficiency being equal for violinists and violists. Widespread teaching of the viola at the collegiate level has only existed since the end of World War II, as previously described. All of the viola professors from this generation would have necessarily been trained as violinists and so would have had intimate familiarity with the violin etudes and studies. We are, at most, only three generations away from these teachers, so it is no wonder their pedagogical methods and materials are still in wide, even universal, use.

⁸⁷ Charlotte Karman, foreword to *Scale System* by Carl Flesch, (New York: C. Fischer, 1942).

⁸⁸ Drüner, *The viola etude*, 57

Chapter 5: The Current State of Pedagogical Materials for the Viola

There are, of course, a number of etudes and methods written specifically for the viola that are now available, and even more have become available in recent years. The most well known are those of the great violist Lillian Fuchs (1910-1995). Her *12 Caprices* (1950), *16 Fantasy Etudes* (1961), and *15 Characteristic Studies* (1965) are a wonderful addition to our pedagogical arsenal and were written specifically to address issues particular to the viola. In fact, in his dissertation looking at the *12 Caprices*, Michael Palumbo writes that Lillian Fuchs communicated to him that she wrote the *12 Caprices* “to help her overcome the problems with which she was faced in playing the viola.”⁸⁹ They address such issues as fingerings, extensions, shifting, bow distribution, “speaking” issues, double-stops, articulation, intonation, trills, and finger independence.

Maurice Vieux, student of Théophile Laforge at the Paris Conservatoire and his successor after he retired, also wrote several books of etudes: *Vingt Etudes pour Alto* (1927), *Dix Etudes pour Alto des Traits D’Orchestre* (1928), *Dix Etudes pour Alto sur les Intervalles* (1931), *Six Etudes de Concerto pour Alto et Piano* (1932), and *Dix Etudes Nouvelles* (1956).⁹⁰ These are used very rarely, if at all, in the United States, although the *Vingt Etudes* is used in Europe, particularly in France. Like the etudes by Lillian Fuchs, Vieux’s etudes also address issues of standard technique specific to the viola. The orchestral etudes (*Dix Etudes pour Alto des Traits D’Orchestre*) are particularly interesting. This set takes ten standard orchestral excerpts and uses them as a point of departure for compositions that expand upon the musical material of the excerpt.

Ulrich Drüner has also issued a three-volume work called *Das Studium der Viola*, which is a compendium of original viola etudes from the nineteenth century that have been out of print for many years. Volume One of this set contains thirty etudes at the level of the Mazas violin etudes. Volume Two is at the level of Kreutzer, and Volume Three is at the level of Rode and Paganini Caprices. In the

⁸⁹ Michael Arnold Palumbo, “The Viola: Its Foundation, Role, and Literature, Including an Analysis of the “Twelve Caprices” of Lillian Fuchs” (Doctoral dissertation, Ball State University, 1981), viii, ProQuest (907373021).

⁹⁰ LeeAnn Morgan, “Vieux’s Other Etudes,” *Journal of the American Viola Society*, 7 (Winter 1991): 13.

Preface, he notes that in studying the many nineteenth-century books of viola etudes, “there was not a single book of etudes of sufficient pedagogical and musical distinction to warrant a complete republication,” hence this compendium.⁹¹ Although this collection was published in 1979, it is hardly known in the United States. It seems much more commonly used in Europe.

Between the etudes of Hoffmeister, Campagnoli, Fuchs, Vieux, and Drüner’s compendium, the viola now has an excellent body of pedagogical materials from which to draw which addresses standard techniques, especially if used in conjunction with the violin etudes. Many early twentieth-century violists, especially Tertis and Primrose, constantly asserted that the viola is not just a big violin and cannot be played like one. They repeated many times, in articles and interviews, how both the bowing technique and the left hand technique of the viola differ from that of the violin, and that playing the viola like a violin will lead to disastrous results. This misunderstanding about viola playing and teaching has, fortunately, been resolved, and current viola students are generally well-taught regarding tone production, bowing technique, fingering and shifting, and other left hand issues. However, a thorough education in standard techniques is not enough for a violist, as described in the introduction. All of the viola etudes listed at the beginning of this paragraph are tonal and draw on standard techniques. With one exception, none of Lillian Fuchs’s or Maurice Vieux’s etudes help prepare violists for the challenges of post-tonal music, despite having been written in the twentieth century. The one exception is the sixth Caprice from Lillian Fuchs’s *12 Caprices*,⁹² which will be discussed more in the second part of this document.

In recent years, some viola professors have started to publish their own pedagogical materials. These include *Extreme Viola! A 12-week Guided Course in Scales, Arpeggios, and Double-Stops* by Ellen Rose of the Dallas Symphony, *The Violist’s Handbook* by Christine Rutledge at the University of Iowa, *A Technical Pedagogy for Viola* by Jeffrey Adams Showell at Bowling Green State University, and *A Notebook for Viola Players* by Ivo-Jan van der Werff at Rice University. All of these are very helpful books, written specifically for the viola, but none of them address issues of twentieth-century music. All

⁹¹ Ulrich Drüner, preface to *Das Studium der Viola* (Kassel: Bärenreiter, 1981-1982).

⁹² Lillian Fuchs, *12 Caprices* (New York: Boosey & Hawkes, 1950).

are tonal and traditional in their scope and although these abilities are, of course, necessary for a violist to master, they are not sufficient.

In the second section of this document, I will present exercises as well as the few etudes that exist which address issues of post-tonal music, with the aim of showing how they can help prepare students for this music, using specific examples drawn from our standard repertoire. In addition to the one Lillian Fuchs etude mentioned above, the pedagogical materials include those by Michael Kimber, Garth Knox, and Alfred Uhl. Garth Knox's book of concert etudes, *Viola Spaces*,⁹³ was written specifically to address the issue of extended techniques. Each etude deals with one extended technique and is intended to give a violist the tools necessary to confront twentieth-century music with knowledge and confidence. Michael Kimber's book, *20th-Century Idioms for Violists*,⁹⁴ is intended to deal with aspects of post-tonal music that differ from older music, such as rhythm, meter, non-tonal language, etc. This goal of this document is to provide an introduction to these pedagogical materials and demonstrate how they can be used effectively in the studio to help prepare violists for the challenges of their repertoire.

⁹³ Garth Knox, *Viola Spaces* (Mainz, Germany: Schott, 2009).

⁹⁴ Michael Kimber, *20th-Century Idioms for Violists* (Iowa City: SoundpointMusic, 2012).

PART TWO – A MORE APPROPRIATE PEDAGOGY FOR THE VIOLA

This part of the document will present the limited pedagogical materials available that can be used to help violists better prepare for the challenges of our repertoire. Each section is devoted to a particular problem found uniquely in twentieth-century music, such as non-tonal scales, mixed meter, and so forth. In each section, I will present various exercises that teachers have taught me or I have developed over the years that I find to be especially helpful in preparation for this music, as well as the etude and scale books that have been written to date that deal with issues specific to post-tonal music. I will use examples from the standard twentieth-century viola repertoire to illustrate how this small body of pedagogical material can be useful preparation for playing it. This is not intended to be exhaustive or comprehensive in any way. My goal is to introduce violists and viola professors to pedagogical material they may not know exists and to give ideas for how it can be used effectively.

Until Schoenberg broke the confines of tonality in the early twentieth century, all Western art music in the standard canon was written in the major/minor tonal system. Each pitch in a key had a specific function and there was general agreement on what was considered consonant and dissonant. On the rhythmic side of things, composers always wrote in simple and compound meters; complex or mixed meters with their irregular subdivisions of the beat were never used. Within a given meter, the beat was subdivided into two, three, four, six, and sometimes eight, but rarely by other divisions like five or seven. When it came to sound, playing with a beautiful, singing tone was desired at all times. In the early twentieth century, this all changed. Composers no longer wrote pieces in major or minor: music could be atonal or could be written using a number of other scales (whole tone and octatonic being the most common). Rhythmically, complex meters with unusual subdivisions like quintuplets became much more common. Additionally, composers began to experiment with ways to get new sounds out of string instruments: playing very near the bridge (*sul ponticello*), playing over the fingerboard (*sul tasto*), or playing with the wood of the bow (*col legno*), among other extended techniques.

For violists, this non-tonal, asymmetrical, and sonically innovative music represents most of our standard repertoire. The violin has a large body of twentieth- and twenty-first-century music, too, of course, but the vast majority of its standard repertoire is from the eighteenth and nineteenth centuries. It is possible, unfortunately, as a violinist to get through one's entire musical education never having performed a solo piece written after 1900. All musicians should be well versed in post-tonal music, but for violists it is not optional. Therefore, the challenges of our music require that we have a pedagogical literature that goes beyond the major/minor tonal system, standard meters and subdivisions, and traditional playing techniques. None of the standard scale books (Flesch, Galamian, even Primrose's book) present anything other than major and minor scales and arpeggios. Violinists and violists typically practice scales in thirds, sixths, and octaves as well, to the exclusion of other double-stop intervals. All of the standard etude books are also tonal, in symmetrical meters, and utilize traditional playing techniques.

In our repertoire as violists, we encounter fourths and sevenths much more often than thirds and sixths. We play in atonal, octatonic, or whole tone contexts much more than tonal ones. Asymmetrical meters and rhythms are not uncommon and neither are extended techniques. If a violist has only ever practiced pre-twentieth-century music, he or she is often very ill equipped when faced with twentieth-century music for the first time. It's frustrating to practice when one doesn't know how to approach, let alone solve, a problem, and it leads to poor musical and technical choices. It can also lead to a dislike of non-tonal music, which is often caused by a lack of understanding. This is quite unfortunate, especially since as a violist it is impossible to have a career and not play music written after 1900. With more adequate preparation, violists will have better resources with which to tackle their standard repertoire, leading to more informed and confident performances, and therefore enhanced career opportunities and success.

Chapter 1: Pitch

1.1 Non-Tonal Scales

Twentieth-century composers use a wide variety of non-tonal scale systems in their music. Some are easier to play and to hear than others. This section will deal with pentatonic and modal scales, whole-tone scales, octatonic scales, as well as scale fragments and other scalar figures that don't fit easily into any particular system. Scales are (or should be) some of the most automatic musical material we play⁹⁵ because the fingers always move "in order" and because instrumentalists typically start playing scales from a very young age. Because of the strength of muscle memory, scalar passages that don't fit into a major/minor framework can become even more challenging because the player must simultaneously override the automatic muscle memory for tonal scales and also play accurately the pattern the composer has written. If there are no other overlearned⁹⁶ patterns to fall back on, the player has to resort to thinking about each note individually. It is widely known that humans can process much more information if that information is "chunked" into meaningful parcels of individual pieces of information.⁹⁷ For instance, phone numbers with area code are ten numbers long, which would be very difficult to remember as ten individual, and therefore random, numbers. However, most people only have to remember six pieces of information: the area code, the prefix, and the last four digits. This is much more manageable and is why it's much easier to remember a phone number for someone where you live than a long-distance phone number where the area code and prefix are not automatic, chunked pieces of information. The same is true for musicians: the more we can "chunk" groups of pitches into a familiar, automatic patterns, the easier it will be to read, learn, and play them. Because musicians often only have a very small number of automatic patterns to draw on, they have to write in individual fingerings for more contemporary music.

⁹⁵ L. Jäncke, N.J. Shah, and M. Peters, "Cortical Activations in Primary and Secondary Motor Areas for Complex Bimanual Movements in Professional Pianists," *Cognitive Brain Research* 10 (2000): 177-183.

⁹⁶ An overlearned physical task is typically defined as one that is performed so often as to be automatic. Writing, typing (for those who know how to type), and riding a bike are examples of overlearned abilities.

⁹⁷ G. A. Miller, "The Magical Number Seven, Plus or Minus Two: Some Limits on our Capacity for Processing Information," *Psychological Review* 63 (1956): 81-97.

All musicians, but especially violists, need a greater number of automatic patterns to fall back on so they don't have to write in individual fingerings – they can indicate patterns, which are much more efficient.

a. Pentatonic and modal scales

Pentatonic and modal scales are arguably the easiest to assimilate because they are so close to the major/minor tonal system. A pentatonic scale is simply a subset of the major/minor scale (removing the half-steps). Modal scales are precursors to the major/minor system, and in fact the major (Ionian) and natural minor (Aeolian) scales can be thought of as just two different kinds of modal scales. To most modern Western listeners, modal and pentatonic scales sound nearly tonal, with a rustic, folksy, or antiquated flavor to them. Because they are the least challenging both aurally and physically, pentatonic and modal scales and etudes can serve as an excellent introduction to non-tonal musical language.

Michael Kimber's scale book, *Scales, Arpeggios, and Double-stops for the Violist* includes, among other non-tonal scales (discussed below), two-octave pentatonic and modal scales in four transpositions, as well as a variety of scales from other musical traditions (including Japanese, Hungarian, Spanish, and bebop scales).⁹⁸ Although a violist may never encounter these more esoteric scales in their standard repertoire, when instrumentalists practice major and minor scales exclusively, any non-tonal scale becomes unusual and, often, more difficult and confusing than it should be because it doesn't fit the narrow patterns of tonality. On the other hand, when players incorporate regular practice of non-tonal scales into their routine, any form of non-tonal scale encountered in music is much more easily understood, fingered, and played because the player's scale framework is much more broad and flexible.

In addition to this scale book, Michael Kimber has also written a book of studies dealing with twentieth-century styles and challenges. This book, *20th-Century Idioms for Violists*, being written as I write this document, is a great introduction to many of the challenges that a violist will encounter in the standard repertoire. They have been written so that they can serve as an introduction to these issues, and

⁹⁸ Michael Kimber, *Scales, Arpeggios, and Double-stops for the Violist*, fourth ed. (Iowa City: SoundpointMusic, 2011).

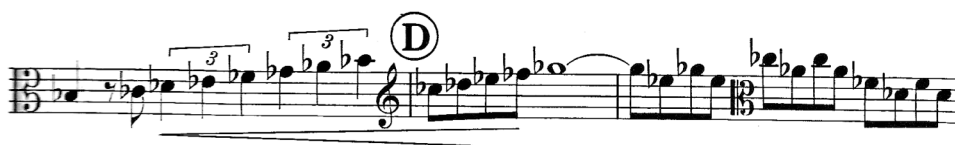
as such are not too challenging. Ideally, they would be used in early high school, or even late middle school (for the easier ones), but certainly by the first or second year of a bachelor's degree. The book starts with a pentatonic study, which begins in C pentatonic and modulates to Db pentatonic in the middle:

Example 1.1: Kimber *20th-Century Idioms for Violists*, Pentatonic study, mm. 13-20



The inclusion of this modulation to a set of pitches with many accidentals makes this study especially valuable in that Hindemith often writes modal and pentatonic melodies that include lots of accidentals. These sections in Hindemith's compositions should be some of the easiest because they are often the most tuneful, but the presence of many accidentals looks intimidating and makes them seem harder to play than they actually are. For instance, towards the beginning of *Der Schwanendreher*, often one of the first pieces by Hindemith that violists play and one of the most accessible, are three measures in which every note has a flat:

Example 1.2: Hindemith *Der Schwanendreher*, movement I, 1 before D to 2 after D



This is simply an A-flat natural minor (or Aeolian modal) scale, but because of the accidentals, and the lack of a key signature, it looks much more difficult than it is. A similar passage occurs in the third movement of Hindemith's Sonata for Viola and Piano op. 11, no. 4:

Example 1.3: Hindemith Sonata for Viola and Piano op. 11, no. 4, movement III, 3 before #15 to 1 before #15



Here, again, these scales are in E-sharp natural minor/Aeolian mode, which can be more easily thought of as F natural minor. Familiarity with the natural minor mode, rarely used in tonal music because of its lack of a leading tone, makes these passages much less confusing and reveals how straightforward and easy they actually are.

In addition to these examples, many early twentieth-century composers make use of modal writing. The beautiful opening of the second movement in *Der Schwanendreher* starts in A Lydian and then modulates to D Lydian:

Example 1.4: Hindemith *Der Schwanendreher*, movement II, beginning to 1 before B



The opening of the third movement of the same piece is in D Mixolydian:

Example 1.5: Hindemith *Der Schwanendreher*, movement III, m. 7 to 1 before A (alto clef)⁹⁹



In Hindemith's Sonata for Viola and Piano op. 11, no. 4, although the theme of the second movement Theme and Variations is in Eb natural minor, Variation IV is in E Lydian, resulting in the unusual key signature of F-sharp and G-sharp:

Example 1.6: Hindemith Sonata for Viola and Piano op. 11, no. 4, movement II, 6 before #13 (Variation IV) to 4 before #13



The Sonata for Viola and Piano by Rebecca Clarke¹⁰⁰ also moves very fluidly through major, minor, pentatonic, and modal scales. The famous opening statement is in E Dorian (example 1.7), whereas the opening of the final movement moves between pentatonic, A-sharp natural minor, and C-sharp Dorian (example 1.8). Towards the end of the movement is a melody in E-flat Dorian, setting the stage for the (eventual) return of the opening material in E Dorian (example 1.9).

⁹⁹ Any musical examples for which no clef appears at the beginning of the excerpt have the (starting) clef indicated at the end of the example description, as done here.

¹⁰⁰ Rebecca Clarke, *Sonata for Viola and Piano* (Boca Raton, Florida: Masters Music Publications, 2002).

Example 1.7: Clarke Sonata for Viola and Piano, movement I, beginning to #1

Impetuoso.
f
poco rit.
p ad lib.
cresc.
mf
accell.
f
allarg.

Example 1.8: Clarke Sonata for Viola and Piano, movement III, 7 before #26 to 2 before #27

pp
poco rit.
 [26] *a tempo*
sul G
p semplice
rit.
a tempo
espr.
p
pp
ten. ten.

Example 1.9: Clarke Sonata for Viola and Piano, movement III, #35 to #36 (alto clef)



The pieces presented here are some of the most accessible and most popular twentieth-century pieces in the viola repertoire and are often studied early in a violist's collegiate education. Because they all use tonality and modality, they can serve as a first, gentle step into the world of non-tonal music. As preparation for playing them, Michael Kimber's non-tonal scales and his pentatonic etude can provide a relatively easy introduction to their language.

b. Whole-tone scales

Modal scales differ from major and minor scales simply by where the half-steps fall. Pentatonic scales remove the notes that would result in half-steps. Whole-tone scales, on the other hand, are made up of all whole-steps. The whole-tone scale became popular in the late nineteenth century, in large part thanks to composers like Claude Debussy, who were drawn to the symmetrical nature of the scale and the fact that, without half-steps, the sense of one note leading inevitably to the next is largely eliminated so no single pitch has a stronger "gravitational pull" than any other. Whole-tone scales and fragments are common in early twentieth-century music and have the benefit for string players that they allow a player to move from one position to another without shifting, which is cleaner and can be played faster. Despite this benefit, playing whole-tone scales in which one gradually "creeps" up or down the fingerboard can be uncomfortable to players used to discrete positions and hand-frames. However, the ability to view

positions and hand-frames flexibly is an absolute necessity in playing post-tonal music. In fact, Primrose himself said,

To be overly conscious of “positions” is something I discourage. I rather lean towards the idea that we should think of the whole finger-board as one position, and the left hand, free and uninhibited, should never feel *obliged* to play a certain note with a certain finger....¹⁰¹ also that one can crawl from a position to another with unusual fingerings in a kind of crab-like progression of fingering.¹⁰²

This “crab-like progression of fingering” is extremely useful in twentieth-century music in many contexts, but it is easiest learned in whole-tone contexts. Michael Kimber’s scale book, mentioned above, also includes 2½-octave whole-tone scales. Although he has written in fingerings that require shifting, violists should also practice the fingering that makes it possible to play the entire scale without shifting:

Example 1.10: Whole-tone scale with “crab” fingerings



This type of fingering is put to use in the whole-tone study from his book of etudes as well, both on the small scale and the large scale. For example, in the figure below, it moves from first position to second to third, all without shifting:

Example 1.11: Kimber *20th-Century Idioms for Violists*, Whole-Tone study, mm. 1-4



¹⁰¹Yehudi Menuhin and William Primrose, *Violin and Viola* (New York: Schirmer, 1976), 179.

¹⁰²Dalton, *Conversations*, 120.

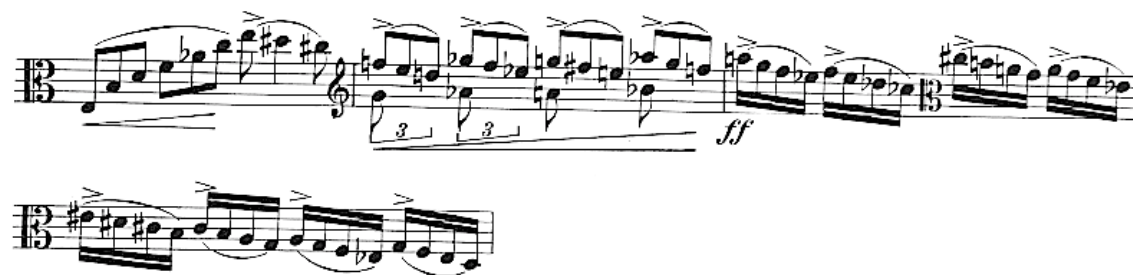
Later in the study, it goes from an open C all the way up to a G-sharp on the A string, again all without shifting:

Example 1.12: Kimber *20th-Century Idioms for Violists*, Whole-tone study, mm. 25-27



Facility with creeping fingerings like this is imperative to develop because it shows up so often in twentieth-century music. An example of this from the standard literature can be found at the end of the second movement of Hindemith's Sonata for Solo Viola op. 25, no. 1 (starting from the third measure of the excerpt below), a piece all violists will play at some point in their lives, usually during their undergraduate degree:

Example 1.13: Hindemith Sonata for Solo Viola op. 25, no. 1, movement II, mm. 51-54



This is simply a whole-tone scale (until the D at the very end, the final sixteenth note of the excerpt). Starting with fourth finger on the A at the beginning of the scale, this passage can be played entirely without shifting, until the aforementioned D. Many violists try to play this with several shifts, but given the speed of the descent, this fingering is often not very clean, not to mention unnecessary. Because of the changes in spelling through the scale, a violist unaccustomed to playing whole-tone scales might not

realize that this is, in fact, a whole-tone scale, resulting in a fingering that would be more appropriate for a tonal scale.

c. Octatonic scales

Octatonic scales are characterized by an alternation between half-steps and whole-steps. Michael Kimber's scale book also includes all three octatonic scales in two octaves and although he writes in a fingering, there are many possible fingerings for octatonic scales and students should be encouraged to experiment with different fingerings and to assess the strengths and weaknesses of each. In fact, the creeping fingerings discussed above are also useful in octatonic contexts. Students should practice octatonic scales with both creeping fingerings and more standard fingerings that require shifting. The octatonic study from Kimber's collection also provides good additional practice in unconventional fingerings, requiring students to use fingerings that might be initially uncomfortable because some notes end up being played with a different finger than they would usually use for that particular note. However, developing facility with fingerings like this is necessary to achieve fluidity and comfort in playing post-tonal music. Some examples from the study are below:

Example 1.14: Kimber *20th-Century Idioms for Violists*, Octatonic study, mm. 13-15



Example 1.15: Kimber *20th-Century Idioms for Violists*, Octatonic study, mm. 21-22



Uhl's Etude No. 2 from his book of *Zwanzig Etuden für Viola*¹⁰³ (20 Etudes for Viola) is also excellent practice in these types of fingerings. This etude is a spiccato study, but it can also be used as a fingering study. There are several places where using “crab” fingerings will make playing cleanly much easier.

Two excerpts are shown below with my fingering suggestions:

Example 1.16: Uhl *Zwanzig Etuden für Viola*, Etude No. 2, mm. 11-16 (alto clef)



Example 1.17: Uhl *Zwanzig Etuden für Viola*, Etude No. 2, mm. 41-48



Students studying this etude should be encouraged to experiment with fingerings and to come up with those that require few to no slides (that is, the same finger two notes in a row).

In the literature, it is unusual to find entire whole-tone scales, like the Hindemith example above, or entire octatonic scales. Much more typical are either small fragments or figures that require this kind of creeping fingering that aren't necessarily whole-tone or octatonic but nevertheless don't fit neatly in one (or two) positions. In contexts where these types of figures need to be played quickly and/or cleanly, shifting should be kept to a minimum. The Hindemith Sonata op. 25, no. 1 contains an example of this, in the middle of the second movement. Here, the music is fast and slurred, so any shifts have to be disguised

¹⁰³ Alfred Uhl, *Zwanzig Etuden für Viola* (Mainz, Germany: Schott, 1973).

as much as possible; therefore, it's better to avoid shifting whenever possible without resulting in string crossings that make smooth slurs difficult or impossible. Below is one fingering possibility:

Example 1.18: Hindemith Sonata for Solo Viola op. 25, no. 1, movement II, mm. 24-29 (alto clef)



Sometimes, a passage is so fast that shifting is not an option. This occurs often in contemporary chamber and orchestral music, especially in sections where the composer wants a highly active, but murmuring effect. An example from the solo literature for viola comes from the fourth movement of the Ligeti Sonata for Viola Solo.¹⁰⁴ Although this piece was written very recently (1991-1994), it is quickly becoming part of the standard repertoire. The fourth movement, easily the most difficult of the six, is called “Prestissimo con sordino” and it is a *sotto voce moto perpetuo* that is a tour de force in left and right hand dexterity. It is marked to be played as fast as possible (“So schnell wie möglich”), meaning that to achieve the effect Ligeti wants, shifting should be avoided as much as possible so as to not slow the music down. Below are a few examples of passages that are made easier by using “crab-like” fingerings:

Example 1.19: Ligeti Sonata for Viola Solo, movement IV, m. 1



¹⁰⁴ György Ligeti, *Sonata for Viola Solo* (Mainz, Germany: Schott, 2001).

Example 1.20: Ligeti Sonata for Viola Solo, movement IV, mm. 9-10 (alto clef)

Example 1.21: Ligeti Sonata for Viola Solo, movement IV, m. 18 (treble clef)

Practicing octatonic (and whole-tone) scales and the etudes mentioned above will give students increased facility with this way of looking at fingering, which is so necessary for post-tonal music but infrequently used in tonal music.

d. Chromatic scales

Chromatic scales and fragments occur in tonal music, of course, but they are much more common in twentieth-century music and are often very fast. Playing a complete chromatic scale is trivial because one just plays all the notes without skipping any. In non-tonal music, however, there are often scale fragments and it is necessary to devise a fingering that avoids sliding between two adjacent notes (but, of course, this is not always possible due to contextual limitations). Michael Kimber's chromatics study addresses this issue in that it is made up of short fragments and longer scales, most of which require a

new finger on each note, but occasionally sliding between notes is necessary (see examples below). The challenge of this etude, besides accuracy of intonation, is to make both fingering types equally clean.

Example 1.22: Kimber *20th-Century Idioms for Violists*, Chromatic study, mm. 10-11



Example 1.23: Kimber *20th-Century Idioms for Violists*, Chromatic study, mm. 15-17



This study also provides fingerings that develop comfort with playing ascending chromatics using a variety of different fingering options (see example 1.24). In playing chromatics, this kind of flexibility with fingering choice is necessary to ensure smart, clean fingerings.

Example 1.24: Kimber *20th-Century Idioms for Violists*, Chromatic study, m. 13 and m. 23

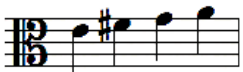


Example 1.27: The four different Pick Four patterns

Pattern 1: Half-step between first and second fingers, whole-steps between the rest:



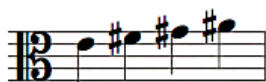
Pattern 2: Half-step between second and third fingers, whole-steps between the rest:



Pattern 3: Half-step between third and fourth fingers, whole-steps between the rest:



Pattern 4: All whole-steps:



One starts this exercise by picking four numbers from between one and four at random, so, for example, 3142. The first number indicates the finger pattern on the C string, the second on the G string, and so on. This exercise always starts on the first finger on each string and goes through all four fingers in order (no open strings), just like a scale. So, the pattern 3142 played in first position would result in the following notes:

Example 1.28: Pick Four pattern 3142 in first position, ascending



Like Galamian one-position scales, these Pick Four scales are played up and down with a “turn around” at the top:

Example 1.29: Pick Four pattern 3142 in first position, ascending and descending



Mr. Slowik advocates starting with four notes slurred, then eight notes slurred, then sixteen notes slurred, each bowing pattern necessarily getting faster so that the finger patterns are forced to become more automatic:

Example 1.30: Pick Four pattern 3142 in first position, ascending and descending with increasingly longer slurs



This exercise should be played starting in at least half-position through fifth position, with a different pattern picked each day. Students will quickly find that some patterns are much harder than others.

When students start doing this exercise, they should be asked to name the pitches out loud, using alphabetical spelling (so, D-sharp, E-sharp, F-sharp, G-sharp would be correct; as would E-flat, F, G-flat, A-flat; but D-sharp, F, F-sharp, G-sharp would be incorrect). Often when students play tonal scales, they

are not really aware of which notes they are playing, especially in more remote keys, because they are doing it by ear. This exercise cannot be done by ear, which is one of its benefits. But it can be done purely mechanically, by feeling the patterns without any awareness of which notes are being played. Naming notes out loud forces a consciousness of specific notes, helping students develop a more thorough understanding of their fingerboard and preparing them for music that uses non-tonal scales and scale fragments spelled in unusual ways.

As mentioned earlier, one of the most difficult things about playing non-tonal scales is that it is hard to find recognizable patterns, especially when a player is used to the patterns formed by major and minor scales. Of course, the four patterns in Pick Four can all be found in major and minor scales, but the combination of these four-note patterns is predictable in tonal scales. In non-tonal scales, the combination of scale fragments is not. I have devised a notation system to mark the Pick Four patterns into my music to help me learn, read, and play fast scalar passages that don't use tonal scales. I use [1] to indicate Pattern 1, [2] for Pattern 2 and so on. I've also added a fifth pattern, which is a half-step between first and second finger, a whole-step between second and third fingers, and a half-step between third and fourth fingers (a classic octatonic pattern):

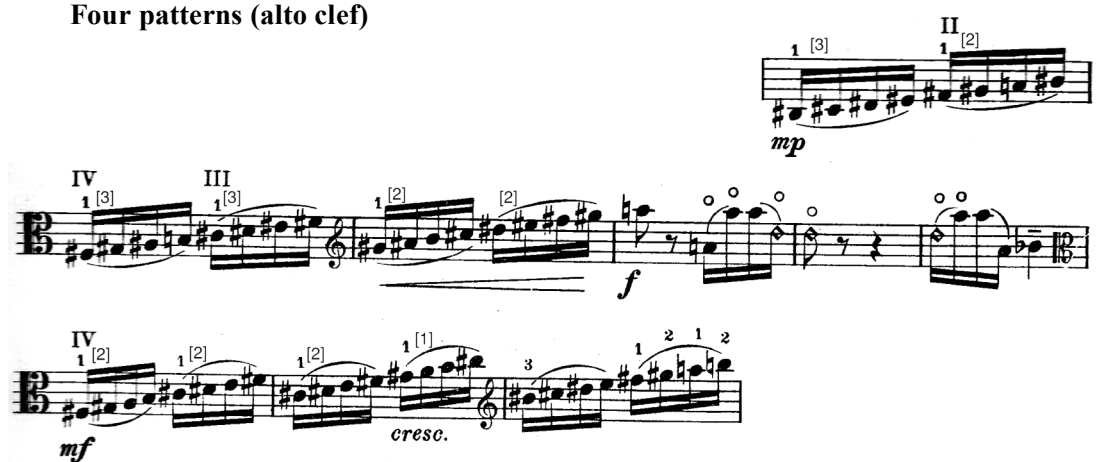
Example 1.31: Pick Four patterns with short-hand marking



The [5] pattern doesn't work as well in the scale exercise described above because it destroys the hand-frame, but being able to mark [5] in music has been very useful. Below is a clear example from the third movement of the Bartók Viola Concerto, illustrating how this can be used to mark music and help the player recognize patterns (example 1.32).

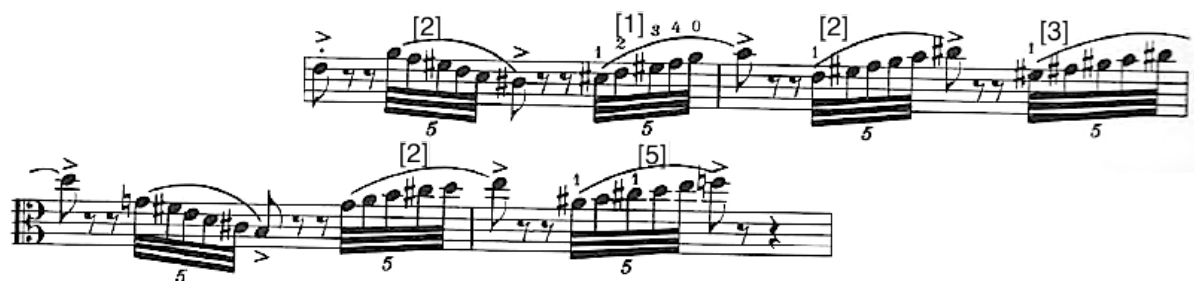
Example 1.32: Bartók Concerto for Viola and Orchestra, movement III, mm. 181-189 with Pick

Four patterns (alto clef)



For practice applying the Pick Four patterns to music, there are several etudes that focus on unpredictable scale fragments. The first is Etude No. 3 Alfred Uhl's *Zwanzig Etüden für Viola*. This etude, which will also be discussed in the section below on rhythm, is reminiscent of a militaristic section in a Shostakovich symphony. It alternates heavily accented eighth notes with very fast scales, some of which are easily read at a glance, others of which have more accidentals and so are less predictable. Writing in Pick Four markings for as many scales as possible (not all of them work) is good practice for both passages like this that occur in the solo repertoire, discussed below, and for many similar passages in the chamber and orchestral literature. Below is an excerpt from the Uhl etude with Pick Four patterns indicated above the notes:

Example 1.33: Uhl *Zwanzig Etüden für Viola*, Etude No. 3, mm. 5-8 with Pick Four patterns (alto clef)



Etude No. 8 from the same collection of etudes by Uhl is also good preparation for playing fast, unpredictable scale fragments. This etude has both patterns that are one of the five Pick Four patterns as well as patterns that are purely chromatic. Since this combination often occurs in music, this etude is good practice for becoming comfortable with alternating between patterns with both half- and whole-steps and those with only half-steps:

Example 1.34: Uhl *Zwanzig Etüden für Viola*, Etude No. 8, mm. 1-5 with Pick Four patterns



I find that this method of thinking about patterns and marking my part is the most helpful with fast passages, like the ones above, when there isn't time to think about individual notes, just a hand-frame or pattern. The contemporary music specialist Garth Knox says that the secret to playing fast is moving quickly but thinking slowly.¹⁰⁵ What he means by thinking slowly is to chunk notes into patterns. There then are fewer things to think about, resulting in a slowing down of the rate of conscious thought. Below are two more examples from the standard repertoire where this kind of chunking can be helpful. The first is from the last movement of the Bartók Viola Concerto (example 1.35) and is challenging because the accidentals keep changing. The second example is the sixteenth note runs from the beginning of last movement of *Der Schwanendreher*, which are very fast and must be played automatically (example 1.36).

¹⁰⁵ Garth Knox, private lesson with the author, February 16, 2012.

Example 1.35: Bartók Concerto for Viola and Orchestra, movement III, mm. 213-221 with Pick

Four patterns (alto clef)

Four patterns (alto clef)

The musical score is written for a single melodic line in alto clef. It consists of three systems of music. The first system begins with a key signature of one sharp (F#) and a 3/4 time signature. It contains two measures of music, each with a triplet of eighth notes. The second system continues with more triplet patterns, some marked with 'sim.' (simile) and 'poco a poco cresc.' (poco a poco crescendo). The third system starts with a measure marked '220' in a box, followed by more triplet patterns, some marked with 'f' (forte). The score includes various fingering numbers (1-5) and articulation marks like accents and slurs.

1[1] 0 [3]

sub. p leggiero

4 [5] 3 2 [3] [1] [1] [1] 2 3 4 2 [3] 1 [1]

sim. *poco a poco cresc.* - - - -

220

1 [1] 4 [4] 2 [2] 1 1 1 1 2 3 3 1 2

[1] (1 2 3 4) *f*

Example 1.36: Hindemith *Der Schwanendreher*, movement III, 4 after C to 7 before E with Pick

Four patterns

The musical score for 'The Rose Tree' is presented in five systems. The first system is in 3/4 time, featuring a melody in the right hand and a bass line in the left hand. The melody includes a triplet of eighth notes and a quarter note. The bass line includes a triplet of eighth notes and a quarter note. The second system is in 3/4 time, featuring a melody in the right hand and a bass line in the left hand. The melody includes a triplet of eighth notes and a quarter note. The bass line includes a triplet of eighth notes and a quarter note. The third system is in 3/4 time, featuring a melody in the right hand and a bass line in the left hand. The melody includes a triplet of eighth notes and a quarter note. The bass line includes a triplet of eighth notes and a quarter note. The fourth system is in 3/4 time, featuring a melody in the right hand and a bass line in the left hand. The melody includes a triplet of eighth notes and a quarter note. The bass line includes a triplet of eighth notes and a quarter note. The fifth system is in 3/4 time, featuring a melody in the right hand and a bass line in the left hand. The melody includes a triplet of eighth notes and a quarter note. The bass line includes a triplet of eighth notes and a quarter note.

Sometimes, the passage in question isn't terribly fast, but there are so many accidentals that it is difficult to read and the patterns hard to discern. This excerpt from Hindemith's Sonata op. 11, no. 4 is a case in point:

Example 1.37: Hindemith Sonata for Viola and Piano op. 11, no. 4, movement II, 3 before #9 to #9



Without the Pick Four indications, it's hard to see where the half-steps belong because of the accidentals. However, once the Pick Four numbers are added, it's much clearer:

**Example 1.38: Hindemith Sonata for Viola and Piano op. 11, no. 4, movement II, 3 before #9 to #9
with Pick Four patterns**



Initially, this method of chunking finger patterns may seem more mentally challenging, rather than less. However, through daily practice of the Pick Four exercise, the patterns become automatic, increasing ease and facility. When a musician is playing a piece of tonal music and sees a scale or an arpeggio or a series of broken thirds, it is not necessary for her to continue to read the individual notes once it is clear what the pattern is. The same is true for the Pick Four patterns. Once they have become automatic and the patterns are marked in the music, it is only necessary to read the first note of each pattern, not each individual note.

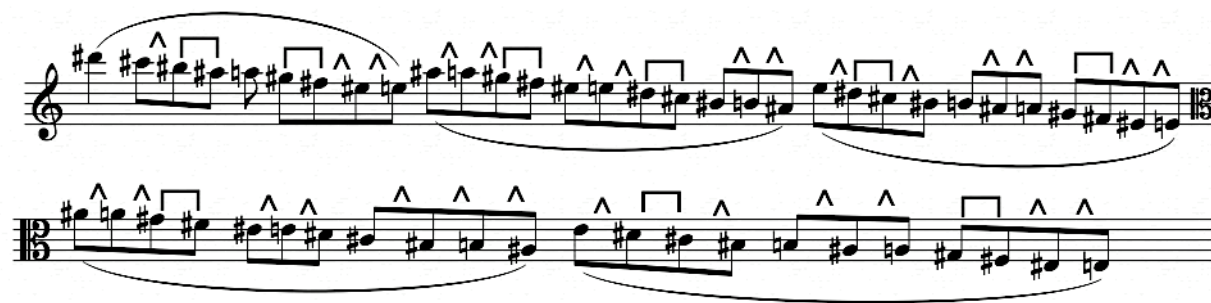
f. Almost chromatic scales

This type of scale has been left for last because the intervals are mostly half-steps, but there are occasional whole-steps as well, and therefore it is often the most challenging. The most famous passage like this is at the end of the first movement of the Bartók Viola Concerto (example 1.39). This passage has two challenges: the notes and the asymmetrical groupings. The rhythm will be discussed more below. As far as the finger patterns go, they should be chunked by position. Once this is done, it becomes clear that all of the patterns are either all half-steps (fully chromatic) or made up of two half-steps and one whole-step. (Incidentally, Primrose's trick fingering of not putting a finger down for the As in measure 241 should be used; the trick works and it makes this passage much easier). The passage is re-written in example 1.40, without rhythm, to make the patterns clear.

Example 1.39: Bartók Concerto for Viola and Orchestra, movement I, mm. 241-243 (treble clef)

The musical score for Example 1.39 consists of five staves. The first staff shows a chromatic scale with fingerings 2, 1, 0, 3, 2, 1, 4, 3, 2, 1, 0, 4, 3, 2, 1. The second staff continues the scale with fingerings 4, 3, 2, 1, 4, 3, 2, 1, 3, 2, 1, 4, 3, 2, 1. The third staff continues with fingerings 4, 3, 2, 1, 3, 2, 1, 4, 3, 2, 1. The fourth staff continues with fingerings 3, 2, 1, 4, 3, 2, 1. The fifth staff continues with fingerings 2, 1. The score includes dynamic markings 'cresc.' and 'ff'.

Example 1.40: Bartók Concerto for Viola and Orchestra, movement I, mm. 241-243 re-written



This passage can be practiced by playing each pattern in isolation, first slowly to solidify the pattern in the fingers, and then faster to make it automatic. Once the individual chunks are automatic, they should be put together as follows, one slur at a time, first slowly to solidify, then fast for automation:

Example 1.41: Bartók Concerto for Viola and Orchestra, movement I, m. 242 practice step 1



Then each individual slur should be played in the same manner (slow then fast). Finally, the chunks on either side of the bow change should be practiced the same way:

Example 1.42: Bartók Concerto for Viola and Orchestra, movement I, m. 242 practice step 3



Next, all adjacent pairs of slurs should be practiced and finally, the whole passage as written. Often, when students are first confronted with this passage (and others like it), they are at a loss as to how to practice it. The method outlined above will help make the finger patterns reliable and automatic. This is also a good method for practicing the fourth movement of the Ligeti Sonata, described above. Prior practice

with non-tonal scales and the Pick Four exercise will enable students to look at scale fingerings flexibly and have a command of patterns that don't correspond merely to major and minor scales, a significant help in learning a passage like the one in the Bartók Concerto.

1.2. Double-stops

The standard double-stops violinists and violists are taught to practice in scales are thirds, sixths, and octaves. Violinists are also instructed to practice tenths. For the violin repertoire, this makes sense as these are the most common types of double-stops encountered. They are consonant, stable intervals highly favored by tonal composers. For twentieth-century composers, however, these intervals are less desirable because of their strong tonal tendencies. Post-tonal music is much more likely to include dissonant intervals, like seconds, tritones, sevenths, and ninths. Paul Hindemith's theoretical system views fourths and minor sevenths as consonances and his music largely treats them as such. In traditional music theory, writing parallel fifths is considered a cardinal sin, whereas many twentieth-century composers liberally include them. For violists, practicing predominantly thirds, sixths, and octaves is exactly backwards. In our standard repertoire, fourths, fifths, tritones, and sevenths are much more common. Therefore, violists would be much better served by focusing their double-stop scale practice on these intervals. The most common way to practice double-stops is in tonal scales, and scales in thirds, sixths, octaves, and tenths are included in the Flesch Scale System and many other scale books. Practicing tonal scales in fourths, fifths, tritones, and seventh can be problematic, however, because of the necessary inclusion of non-diatonic notes if the quality of the interval is to be maintained (i.e., practicing scales in parallel fifths in A major would necessitate a G natural below open D to preserve the parallel fifth here). There are two options: preserve the quality of the interval and realize that the lower voice will necessarily include non-diatonic notes, or play only diatonic notes in both voices and have the interval quality adjust accordingly. Both are valuable because they address slightly different issues. It is not uncommon in twentieth-century music for there to be tonal implications in a passage that is not actually tonal. As an example, consider the top voice in these three notes from the last movement of the Ligeti Sonata:

Example 1.43: Ligeti Sonata for Viola Solo, movement VI, m. 68 (treble clef)



They imply C major. However, the other notes of the double-stops strongly contradict this, despite the fact that the top voice is heard as predominant. In contexts like this, it can help the ear to realize the tonal implications (and therefore guide the hand), but it is also necessary to be able to hear the intonation of the “non-diatonic” notes accurately. Practicing scales in which the top voice is diatonic but the bottom voice is sometimes not helps train the ear for these instances.

The other option, playing only diatonic notes and changing the quality of the interval, is also useful simply because long stretches of parallel intervals are unusual (although, as discussed below, they still occur frequently in the viola repertoire), and accurate switching between interval types is a necessary skill. Scales written using both of these options in seconds, fourths, fifths, and sevenths are included in Appendix 2.

a. Fourths

Because fourths are a perfect interval, any intonation imperfections in playing this double-stop are very obvious. Non-tonal composers seem to have an especially affinity for this interval, both as a double-stop and as a melodic interval, and it is found everywhere in the viola repertoire. For these reasons, violists should make practicing fourths a daily habit. In addition to practicing scales, there are two etudes that can be used to put accurate performance of fourths into a musical context. The first is Michael Kimber’s Quartal study, which mostly deals with fourths as melodic intervals, but also includes double-stop practice. Importantly, the double-stops require the fourths to be played both by changing fingers and by using the same fingers for two consecutive intervals:

Example 1.44: Kimber *20th-Century Idioms for Violists*, Quartal study, mm. 17-19



While this etude focuses almost exclusively on fourths, Etude No. 7 by Alfred Uhl (from the *20 Etudes* collection) uses all double-stops. This etude is an excellent double-stop study for twentieth-century music in general because it contains a variety of interval types. In terms of fourths, it uses fourths as passing intervals, arrival points, and in parallel succession:

Example 1.45: Uhl *Zwanzig Etüden für Viola*, Etude No. 7, mm. 1-16

Examples of fourths from the literature are numerous. The most challenging passages are those that require multiple parallel fourths. Below are three of the most famous passages, the first from the end of the second movement of the Bartók Viola Concerto (example 1.46), the second and third from the second movement of the Shostakovich Sonata for Viola and Piano¹⁰⁶ (examples 1.47 and 1.48). The challenge in all of these examples is maintaining the intonation of the interval while the hand-frame changes slightly during the fast shifting. Practicing scales in fourths, keeping the fingering the same

¹⁰⁶ Dmitri Shostakovich, *Sonata for Viola and Piano*, op. 147 (New York: G. Schirmer, 1975).

between consecutive intervals, is good preparation for successful performance of these three passages.

Example 1.46: Bartók Concerto for Viola and Orchestra, movement II, mm. 70-78 (alto clef)

Example 1.47: Shostakovich Sonata for Viola and Piano, op. 147, movement II, mm. 106-118

Example 1.48: Shostakovich Sonata for Viola and Piano, op. 147, movement II, mm. 225-229 (treble clef)

There are also instances of parallel fourths that are either best or necessarily played by different fingers. Below are four examples, two from the Shostakovich sonata, one from the opening of *Der Schwanendreher*, and one from the last movement of the Ligeti Sonata (note that in the Ligeti excerpt, the fourths played with different fingers are preceded by fourths played with the same fingers):

Example 1.49: Shostakovich Sonata for Viola and Piano, op. 147, movement II, mm. 187-190



Example 1.50: Shostakovich Sonata for Viola and Piano, op. 147, movement III, mm. 52-57



Example 1.51: Hindemith *Der Schwanendreher*, movement I, 2 before B (alto clef)



Example 1.52: Ligeti Sonata for Viola Solo, movement VI, mm. 52-54



The difficulty in playing parallel fourths with different fingers is that one finger from the first double-stop must hop over the string to participate in the second double-stop, much like playing consecutive parallel sixths. The challenge, besides playing in tune, is to make the transition between double-stops as smooth as possible. Practicing scales in fourths with different fingers both slurred and separate is good preparation for these passages. In practicing slurred scales, the change from one double-stop to the next should be as seamless as possible, whereas with separate bows, the change should be timed to coincide exactly with the bow change.

The third incidence of fourths that a violist will encounter is the fourth as an arrival. Some examples from the literature include the opening (and end) of the second movement of *Der Schwanendreher*, the opening of the third movement of Hindemith's Sonata op. 25, no 1, and the fifth movement of the Ligeti Sonata:

Example 1.53: Hindemith *Der Schwanendreher*, movement II, 3 before B to 1 before B (alto clef)



Example 1.54: Hindemith Sonata for Solo Viola op. 25, no. 1, movement III, mm. 1-3



Example 1.55: Ligeti Sonata for Viola Solo, movement V, mm. 20-23 (alto clef)



Example 1.56: Ligeti Sonata for Viola Solo, movement V, mm. 31-40

31 *ffff* *fff* *pp* sul tasto, flautando

37

Example 1.57: Ligeti Sonata for Viola Solo, movement V, mm. 63-64 (alto clef)

sul tasto, flautando

ppp *attacca, ord.*

Passages like those above can sometimes be even more difficult than parallel fourths because the intonation has to be absolutely perfect from the start, and any wavering in pitch will be easily audible. Also, because the fourths in the above examples are arrivals, there is increased psychological pressure to play perfectly in tune because an out-of-tune cadence is much more obvious than out-of-tune passing notes, as in the parallel fourths above. Practicing scales in fourths will train the hand-frame so that playing fourths in tune becomes automatic. The Uhl etude discussed above, No. 7, will then put this into practice because of the held arrivals on fourths that occur in this study.

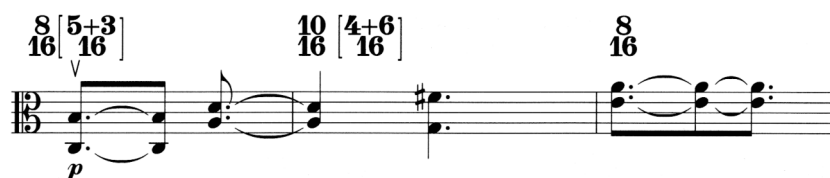
Fourths, of course, also occur in passing and as melodic intervals. A few examples are below, the

first from Hindemith's Sonata for Viola and Piano op. 25, no. 4¹⁰⁷ (melodic fourths), the second from the second movement of the Ligeti Sonata, and the third from the sixth movement of the Ligeti Sonata (which also includes instances of parallel fourths and a fourth as an arrival):

Example 1.58: Hindemith Sonata for Viola and Piano op. 25, no. 4, movement I, mm. 46-49 (alto clef)



Example 1.59: Ligeti Sonata for Viola Solo, movement II, mm. 1-3



Example 1.60: Ligeti Sonata for Viola Solo, movement VI, mm. 1-8



¹⁰⁷ Paul Hindemith, *Sonata for Viola and Piano* op. 25, no. 4 (Mainz, Germany: Schott, 1977).

These cases are, perhaps, easier than those discussed above because of the musical and technical context, but playing the fourths accurately is, of course, still necessary and a challenge. All of the methods for practicing fourths discussed above will benefit these passages as well because the exercises are designed to make playing fourths in tune as automatic and reliable as possible, no matter what their context.

b. Fifths

For the lucky minority with wide finger pads, playing fifths is trivial since the same finger plays both strings. For most violists, however, small finger pads combined with the increasing distance between the strings as one ascends makes playing fifths in tune very difficult. Of course, fifths are common in tonal music, so this is not an infrequently encountered double-stop. The difference in non-tonal music is that composers write parallel perfect fifths, absolutely forbidden in tonal music, and they write them much higher on the fingerboard. For people with slender fingers, playing perfect fifths in tune often means finding an unorthodox hand and/or finger position that will allow for good intonation. Practicing scales in fifths can help violists figure out what works best for them. Unfortunately, there are no etudes that address this issue.

Two of the most notorious examples of difficult fifths come from the Bartók Viola Concerto. The first example, from the first movement, is a long succession of parallel fifths (example 1.61). For violists who cannot play the C/G fifth on the second sixteenth note of the third beat of measure 161 because the space between the strings is too wide here, a sixth (with B on the bottom) can be played instead. Even with this minor change, this passage is very challenging to play in tune at the tempo marked. Fluency with scales in fifths is a big help.

Other instances of difficult parallel fifths can be found in Hindemith's Sonata op. 25, no. 1 and his Sonata for Viola Solo op. 31, no. 4¹⁰⁸ (note the mandatory fifths with the fourth finger in bars 87-88 in the second excerpt from this sonata):

Example 1.63: Hindemith Sonata for Solo Viola op. 25, no. 1, movement II, m. 49 (treble clef)



Example 1.64: Hindemith Sonata for Solo Viola op. 31, no. 4, movement III, mm. 32-33



Example 1.65: Hindemith Sonata for Solo Viola op. 31, no. 4, movement III, mm. 78-89

¹⁰⁸ Paul Hindemith, *Sonata for Solo Viola* op. 31, no. 4 (Mainz, Germany: Schott, 1992).

Again, these passages become less challenging when a student has experience practicing scales in fifths.

c. Tritones

Twentieth-century composers love the tritone for its symmetry and versatility. In tonal music, it has strict resolution rules, which Romantic composers would appear to subvert to their advantage to modulate to unexpected keys. From the time of Guido d'Arezzo in the Middle Ages through the end of the Renaissance this interval was known as the "devil in music."¹⁰⁹ Because this is a dissonant interval, it is harder to hear whether it is in tune or not because of the clashes between the overtones.¹¹⁰ As is the case with other dissonant intervals, it is necessary to train the ear to hear when it is in tune and when it is not. Unfortunately, student instrumentalists often play dissonant intervals out of tune because they seem to be under the impression that either dissonant intervals can't be in tune or it doesn't matter if they are because they haven't learned to listen to their intonation in this context.

As with the other intervals discussed, violists should practice scales in tritones with an ear towards good intonation. Since there is only one naturally occurring tritone in any given major key, the necessity of playing non-diatonic notes when playing scales in tritones is at an extreme. When practicing scales in tritones and sevenths (discussed below) especially, attention should be paid to the intonation of the individual notes as well as the intonation of the double-stop itself. Unfortunately, there are no good etudes for tritone practice. Etude No. 7 by Uhl, discussed above, has very few tritones. However, this etude is so useful for double-stop practice in general that if a student is working on tritone intonation, special attention can be focused on the tuning of the tritones when they do occur.

Below are two passages featuring tritones. The first is from the transition to the recapitulation in the second movement of Hindemith's Sonata op. 25, no. 1 (example 1.66) and the second is from the cadenza in the first movement of Bartók's Viola Concerto (example 1.67).

¹⁰⁹ William Drabkin, "Tritone," *Grove Music Online. Oxford Music Online*. 20 Jul. 2012
<http://www.oxfordmusiconline.com.ezproxy.rice.edu/subscriber/article/grove/music/28403> (accessed July 20, 2012).

¹¹⁰ Yonatan I. Fishman et al., "Consonance and Dissonance of Musical Chords: Neural Correlates in Auditory Cortex of Monkeys and Humans," *Journal of Neurophysiology* 86 (December 2001): 2761-2788.

Example 1.66: Hindemith Sonata for Solo Viola op. 25, no. 1, movement II, mm. 38-39 (alto clef)



Example 1.67: Bartók Concerto for Viola and Orchestra, movement I, mm. 133-135



Both of these passages are somewhat awkward and are often played with bad intonation because when students haven't trained their ears to know when dissonant intervals are in tune, they aren't aware that it is a problem that needs to be practiced and fixed in the first place. Practicing scales in tritones can train the ear so it can help guide the hand in passages such as these. Often, tritones are embedded in chords, necessitating some uncomfortable fingerings from the standpoint of traditional fingering decisions. Chords are discussed further below.

d. Sevenths

Sevenths are everywhere in twentieth-century music, especially the music of Hindemith, who saw the minor seventh as a consonant interval. Traditionally, sevenths are considered dissonant. However, played in tune, a minor seventh does have a certain resonance to it and, with practice, it is not hard to hear it as a consonance. As with tritones, when practicing scales in minor sevenths, listening for pristine intonation should always be a priority. In addition to scales, there are two etudes that can be used to develop both an accurate hand and ear for this interval. The first is the study in Michael Kimber's book called "Seconds, Sevenths, and Ninths." This study treats sevenths as consonances and often requires the student to place them accurately in a new position after a rest. This means that the student must be able to

feel and hear ahead and not rely on “working their way” into the double-stop for accuracy:

Example 1.68: Kimber *20th-Century Idioms for Violists*, Secunda study, mm. 13-18



As is obvious from the title, this etude is also good practice in seconds and ninths, other dissonances that students must train their ears to hear accurately for good intonation. The other etude that is helpful in practicing sevenths in a musical context is Uhl’s Etude No. 7. There are several instances of parallel sevenths in this etude, often also involving shifting:

Example 1.69: Uhl *Zwanzig Etüden für Viola*, Etude No. 7, mm. 33-35 (alto clef)



Examples from the standard literature are numerous. The most famous example is the opening of *Der Schwanendreher*, which has a string of parallel sevenths in the third bar:

Example 1.70: Hindemith *Der Schwanendreher*, movement I, m. 3 (treble clef)



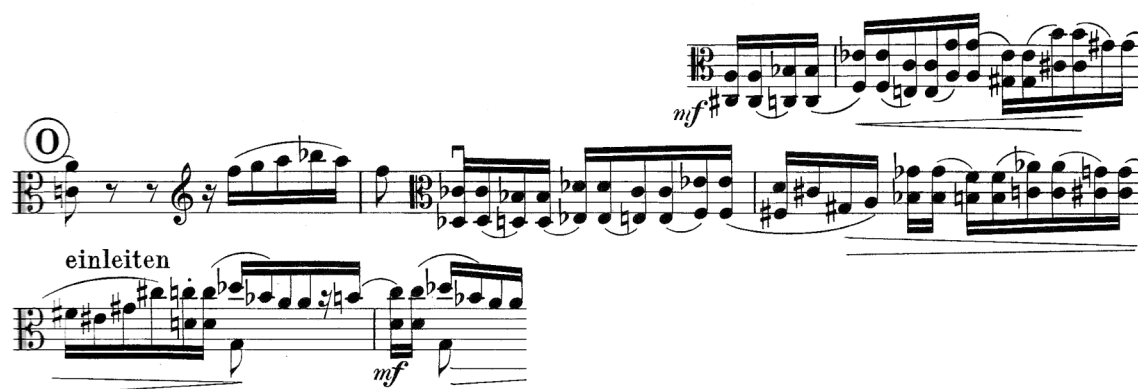
Often, these are played quite out of tune because the violist hasn't learned to hear minor sevenths as a consonance or whether they are in tune, but practicing scales in sevenths in conjunction with the above-mentioned etudes will help solve this problem.

Sevenths are everywhere in Hindemith's music. Below are two more examples from *Der Schwanendreher*, four from Sonata op. 25, no. 1, and one from Sonata op. 31, no. 4:

Example 1.71: Hindemith *Der Schwanendreher*, movement II, B to 5 after B



Example 1.72: Hindemith *Der Schwanendreher*, movement III, 2 before O to 5 after O



Example 1.73: Hindemith Sonata for Solo Viola op. 25, no. 1, movement I, mm. 10-21



Example 1.74: Hindemith Sonata for Solo Viola op. 25, no. 1, movement II, mm. 5-13



Example 1.75: Hindemith Sonata for Solo Viola op. 25, no. 1, movement II, mm. 36-37



Example 1.76: Hindemith Sonata for Solo Viola op. 25, no. 1, movement II, mm. 51-52



Example 1.77: Hindemith Sonata for Solo Viola op. 31, no. 4, movement III, mm. 112-121 (alto clef)



Hindemith isn't the only composer who favors sevenths. In the "Loop" movement of Ligeti's Sonata, in the intervals that make up the loop, twenty-five percent are sevenths, more than any other interval type:

Example 1.78: Ligeti Sonata for Viola Solo, movement II, mm. 1-20

8/16 [5+3] 10/16 [4+6] 8/16 10/16

p

changing of bar
sim: Taktwechsel

5 *mf sub.*

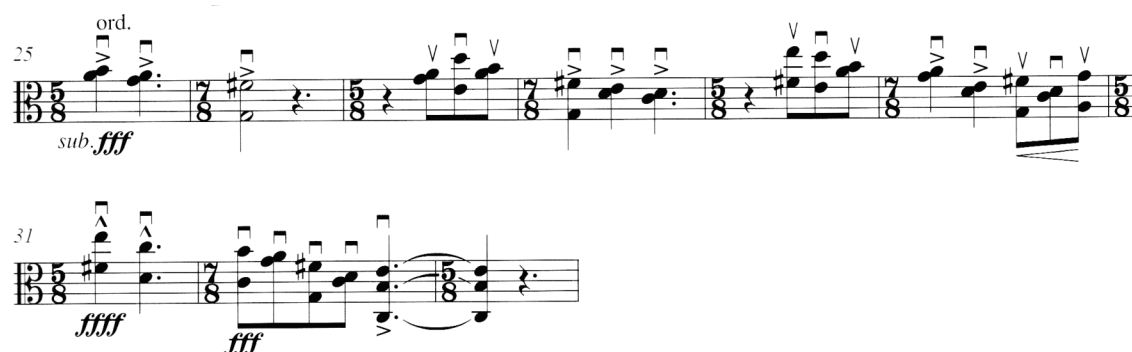
9

13 *ff sub.*

17 *p sub.* II III

In the fifth movement, the *barbaro* sections are made up entirely of seconds and sevenths”

Example 1.79: Ligeti Sonata for Viola Solo, movement V, mm. 25-33



In the Penderecki *Cadenza per viola sola*,¹¹¹ a frequently performed recital and audition piece, there are numerous minor and major sevenths, often in parallel:

Example 1.80: Penderecki *Cadenza per viola sola*, pg. 1 last line to pg. 2 first line



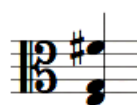
As noted when discussing the sevenths in the opening of *Der Schwanendreher*, the sevenths in all of these examples above are often played quite out of tune. Although sevenths and other dissonant intervals do not have the same resonance as consonances, they do still have resonance. However, when these intervals are played out of tune, this resonance is destroyed and with it, part of the music’s character.

¹¹¹ Krzysztof Penderecki, *Cadenza per viola sola* (Mainz, Germany: Schott, 1986).

1.3. Chords

In twentieth-century music, the types of chords encountered are far more varied than in tonal music and frequently, there isn't an obvious way to finger them. A type of chord seemingly favored by twentieth-century composers is one in which, under normal circumstances, the same finger would play two of the notes on non-adjacent strings. Obviously, this is not possible unless the finger is picked up and repositioned halfway through the chord, which is not ideal and sometimes impossible. Below is an example of a chord like this:

Example 1.81: Chord example



Normally, the same finger would play the E and the F-sharp, but since they are not on adjacent strings, this is not possible. The best fingering for a chord like this would be to play the E with first finger and the F-sharp with second finger. For violists not used to these types of chords, this fingering is very uncomfortable. This is just one example of a chord from a contemporary piece. There are a nearly infinite number of chords, and a violist needs to develop agility with playing unusual combinations of notes with unconventional fingerings. Alfred Uhl's Etude No. 9 from the *20 Etudes* is excellent practice in this (example 1.82). This etude consists of chords and arpeggiations of chords, with many of these chords and arpeggiations requiring unusual fingerings, and playing chords is more difficult than single notes or double-stops simply because there are more notes involved. Twentieth-century composers pushed the boundaries of what was possible musically and technically, resulting in chords that are very unidiomatic from a traditional point of view. Since twentieth-century music is so important in the viola repertoire, these "unidiomatic" chords need to feel idiomatic to violists.

Example 1.82: Uhl *Zwanzig Etüden für Viola*, Etude No. 9, mm. 1-28

This etude is a good entry into gaining comfort with unorthodox fingerings for chords, which will make encounters with them in the repertoire less challenging. Although the specific chords will be different piece to piece, just as Pick Four gives the player more automatic hand positions to fall back on, the more unusual chords a violist has played, the better he or she will be able to cope with a novel one when it shows up. Examples from the literature include:

Example 1.83: Ligeti Sonata for Viola Solo, movement III, mm. 57-60

Example 1.84: Ligeti Sonata for Viola Solo, movement VI, m. 43 (alto clef)



Example 1.85: Ligeti Sonata for Viola Solo, movement VI, m. 51 (alto clef)



Example 1.86: Ligeti Sonata for Viola Solo, movement VI, mm. 52-58

Example 1.87: Ligeti Sonata for Viola Solo, movement VI, mm. 61-69

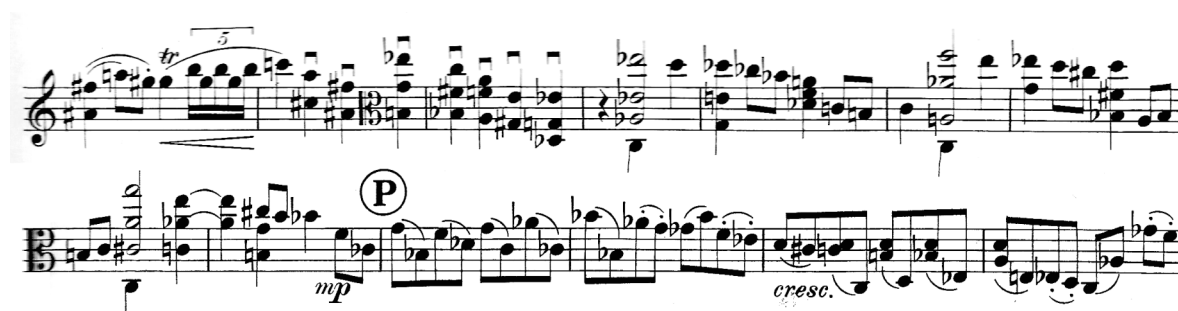
Example 1.88: Ligeti Sonata for Viola Solo, movement VI, m. 73



Example 1.89: Hindemith *Der Schwanendreher*, movement I, 4 before K to 3 before K (alto clef)



Example 1.90: Hindemith *Der Schwanendreher*, movement III, 9 before P to 4 after P

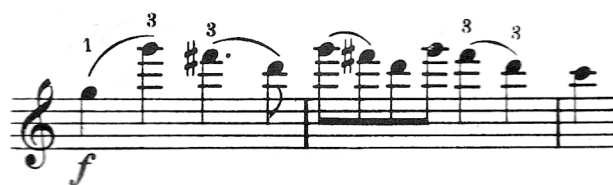


Example 1.91: Hindemith Sonata for Solo Viola op. 11, no. 5, movement I, mm. 1-7¹¹²

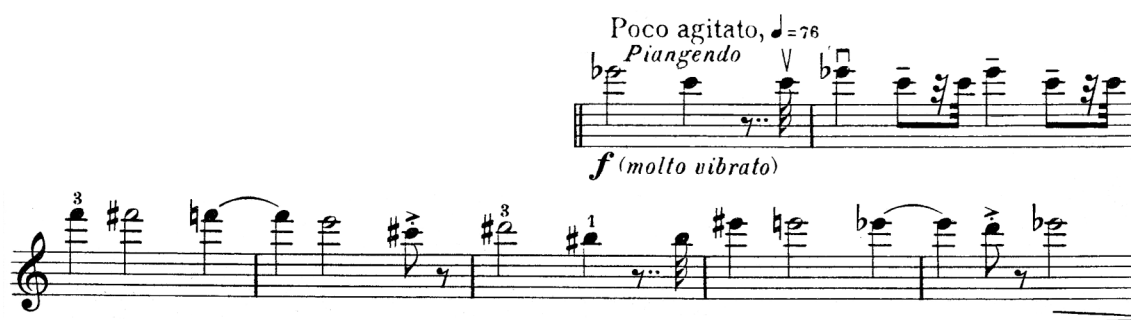


¹¹² Paul Hindemith, *Sonata for Solo Viola* op. 11, no. 5 (Mainz, Germany: Schott, 1951).

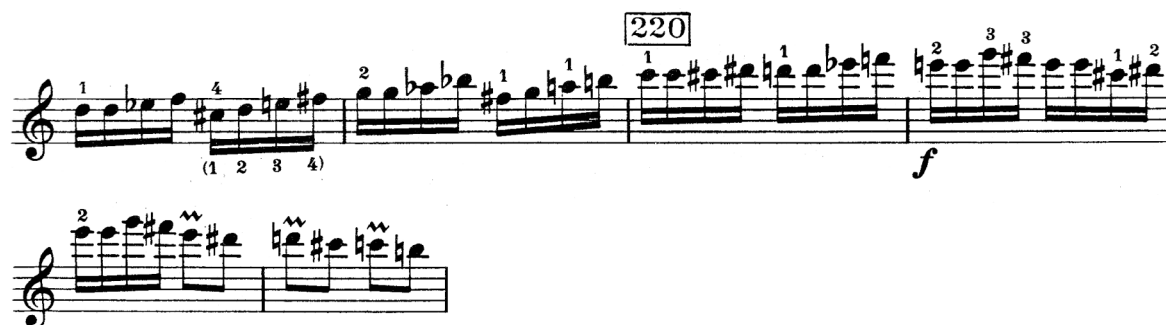
Example 1.93: Bartók Concerto for Viola and Orchestra, movement I, mm. 213-215



Example 1.94: Bartók Concerto for Viola and Orchestra, movement II, mm. 30-37 (treble clef)



Example 1.95: Bartók Concerto for Viola and Orchestra, movement III, mm. 218-223



Example 1.96: Walton Concerto for Viola and Orchestra, movement I, 2 after #2 to 4 after #2



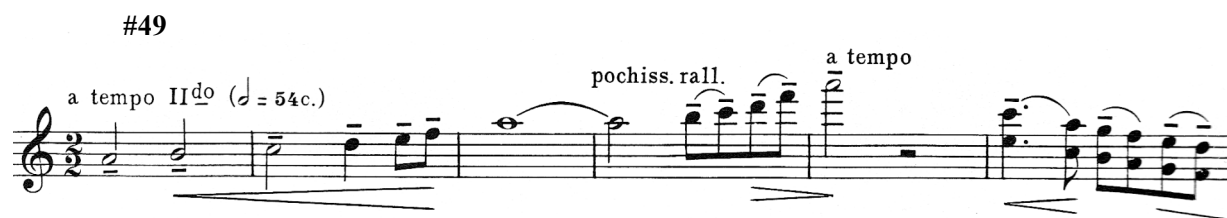
Example 1.97: Walton Concerto for Viola and Orchestra, movement II, 3 before #19 to #19



Example 1.98: Walton Concerto for Viola and Orchestra, movement II, 1 before #25 to #25



Example 1.99: Walton Concerto for Viola and Orchestra, movement III, 8 before #49 to 3 before



Example 1.100: Walton Concerto for Viola and Orchestra, movement III, 3 after #62 to 7 after #62



Example 1.101: Britten *Lachrymae*, 15 after #10 to 21 after #10



If a violist is not used to playing this high, these passages can be very intimidating and uncomfortable. For many, getting over the bout (the thumb is no longer on the neck of the instrument, but rather is on the side of the fingerboard with the hand and wrist next to it as well) is a major obstacle to playing high on the viola, and each individual needs to figure out at which point on the fingerboard it is best to come fully over the bout, if necessary. Keeping the thumb on the neck at all times, as violinists do no matter how high the notes, can be both impractical and potentially physically harmful. Unless a player has a very large hand and a very small viola, keeping the thumb on the neck much above seventh position will make it impossible to vibrate well and will also cause undue strain on the wrist. Many players find, however, that with their thumb on the side of the fingerboard, they feel lost and like a “cat up a tree” with no way down. To combat this, one-string scales, arpeggios, and broken thirds should be played daily in the final (highest) octave on the A string in each key. This will give increased confidence and knowledge of the fingerboard in this register of the viola. Unfortunately, there are no etudes that focus on very high playing on the A string.

On the other hand, Caprice 6 in Lillian Fuchs’s *12 Caprices* addresses playing high on the other strings:

Example 1.102: Fuchs *12 Caprices*, Caprice 6, mm. 1-6

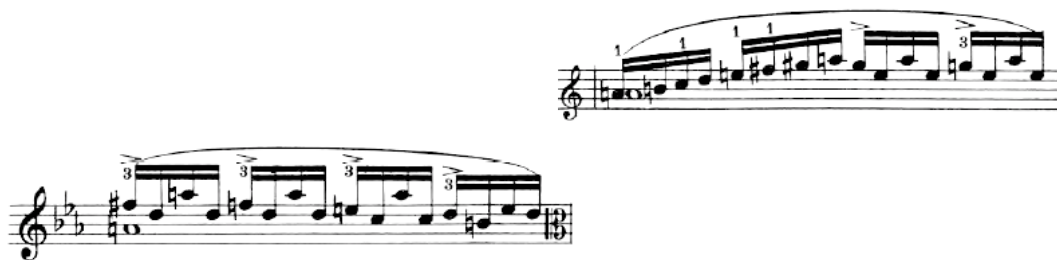
The musical score for Fuchs's *12 Caprices*, Caprice 6, measures 1-6, is presented in three staves. The key signature is B-flat major (two flats) and the time signature is 4/4. The first staff is marked 'Mormoramente' and 'p' (piano). The music features eighth-note scales and triplets, with fingerings (1, 3) and accents (>) indicated. A 'V' marking is present above the first staff. The second and third staves continue the melodic lines with similar rhythmic patterns and fingerings.

Lillian Fuchs was of the opinion that this caprice “should be a daily practice for a long period of time.”¹¹⁶

In addition to the physical challenge of getting around the bout of the instrument when playing high, the lower strings do not have the same rich resonance at this altitude as violin strings do. When playing this high on the G and C strings especially, the viola will not tolerate any unnecessary bow pressure. Violas in general are less tolerant of pressure than violins (Primrose said, “To press leads to well-deserved disaster.”¹¹⁷), and on both instruments sound should always be produced by pulling the string, not pressing on it. When playing high on the G and C strings, any deficiency in this area of tone production will be magnified. So, in addition to this etude, scales, arpeggios, and broken thirds should be practiced in this range on the lower strings as well, with especial attention paid to tone.

This etude is directly applicable to the middle section of the Penderecki *Cadenza*. In the Caprice, the moving notes are almost always against an open-string drone:

Example 1.103: Fuchs 12 Caprices, Caprice 6, mm. 26-27



The same is true in the Penderecki *Cadenza* (example 1.104). Ideally, the sixteenth-note motives, like those that start the middle section, should be played on two different strings (so, the start of the middle section would be played on the G and D strings, not all on the D string). This is necessary in some parts, like the second line of this section (see example 1.105). Often, it is not played this way because it is more difficult, but choosing fingerings based on technical convenience rather than musical, motivic considerations is not good justification.

¹¹⁶ Samuel Applebaum and Sada Applebaum, “Lillian Fuchs,” in *The Way They Play*, Vol. 2 (Neptune City, N.J.: Paganiniana Publications, 1973), 220.

¹¹⁷ Menuhin and Primrose, *Violin and Viola*, 175.

Example 1.104: Penderecki *Cadenza per viola sola*, pg. 2 last 2 lines



Example 1.105: Penderecki *Cadenza per viola sola*, pg. 2 lines 4 and 5

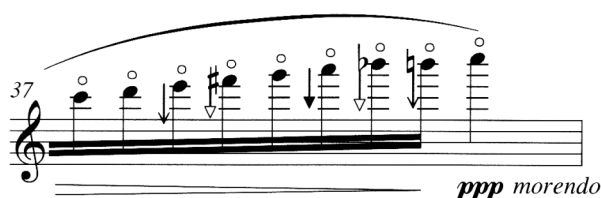


Lillian Fuchs's *Caprice* is also applicable to one of the more unusual pieces in the standard repertoire, the first movement of the Ligeti Sonata, which is entirely on the C string. At its highest point, the music reaches entirely two octaves above the open C string, with the harmonics at the end leaving the fingerboard far behind:

Example 1.106: Ligeti Sonata for Viola Solo, movement I, mm. 28-29



Example 1.107: Ligeti Sonata for Viola Solo, movement I, m. 37



This movement has other challenges, namely the quartertones and the harmonics (discussed below), but even without these issues, playing this high on the C string is not easy. In addition to keeping track of where you are on the fingerboard in unfamiliar territory, getting a good tone this high up on the C string is also a consideration. Some violists will have wolfs¹¹⁸ on some of the notes this high, so negotiating those can be difficult. The common advice for wolf tones is to play them slightly sharp or flat to avoid the clashing vibrations that cause a wolf, but in a movement with quartertones, this is not advisable. In this movement, it is necessary to find the bow weight and speed that will lessen the disturbance caused by any wolf. Even without wolfs, getting the notes to speak is difficult, and at the climax (example 1.106), Ligeti instructs the player to play with the entire length of the bow on each note, further compounding the challenge. As Lillian Fuchs advises, daily practice in the higher positions on the lower strings will make this movement more manageable and more enjoyable to play.

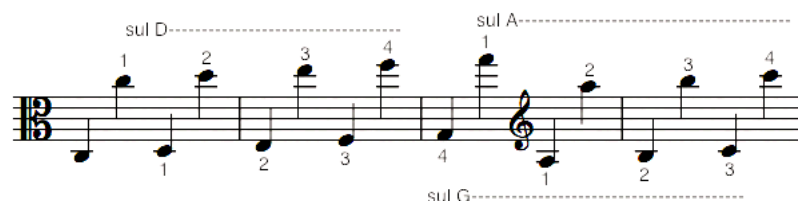
1.5. Large leaps

Along with playing higher for more extended periods comes larger shifts, sometimes much larger. In tonal music, high positions are often reached by climbing up to them, not sudden huge leaps. When these sudden huge leaps occur, it is easy to connect this new register to the old one because of the tonal continuity between where the music came from and where it is now. In contemporary music, this climbing often doesn't occur and the first note in the new register may be difficult to anticipate because of the lack of a tonal framework. For players, this means two things: they must train their ears to hear the

¹¹⁸ A “wolf” is the term used to refer to an individual note that, due to an excess of vibration produced by the top, back, and air cavity of the instrument, results in an unpleasant sound that is often out-of-tune, has an unstable tone, and is difficult or impossible for the player to control and/or mitigate.

new pitch before the play it, and they must train their hand to find very high pitches “out of thin air” without help from the preceding passage. Compounding the problem, these extreme changes in register often occur one after the other in rapid succession, resulting in a lot of jumping around the fingerboard at high speed. One way this skill can be practiced is the following exercise:

Example 1.108: C major scale jumping octaves



This exercise challenges the hand much more than the ear and can be practiced with many different fingerings other than those indicated here (and in all keys at different tempos). Because it is in the context of a scale, the pitch being aimed for is clear, so any inaccuracies in intonation will be immediately obvious. This will help clarify which areas of the fingerboard are a bit hazy when it comes to finger placement, helping to improve accuracy.

In addition to this exercise, Garth Knox’s glissando etude, “One Finger,” from his book *Viola Spaces*, is excellent shifting practice. Most of the standard solo viola repertoire does not include large glissandos to pitches other than open strings or harmonics. However, glissando practice in general benefits shifting ability in all repertoire, especially at times when the goal notes may be difficult to hear. Knox’s glissando etude calls for large and small glissandos on one string as well as more unorthodox glissandos across multiple strings:

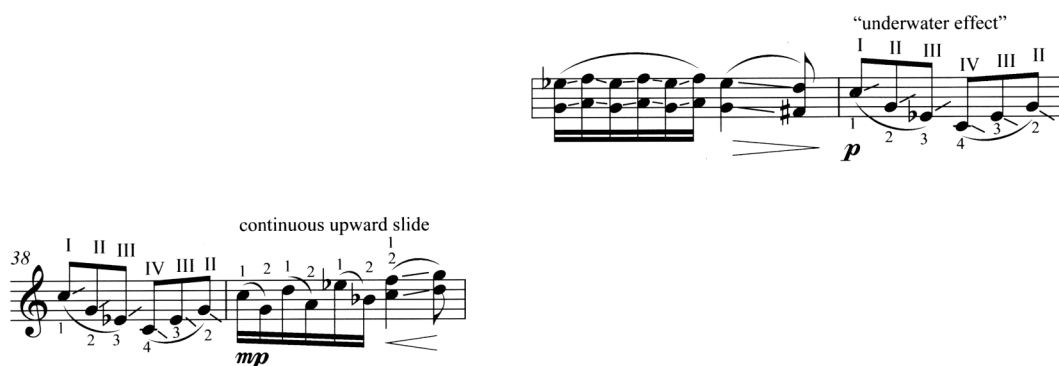
Example 1.109: Knox *Viola Spaces*, “One Finger,” mm. 1-4



Example 1.110: Knox *Viola Spaces*, “One Finger,” mm. 21-22 (alto clef)

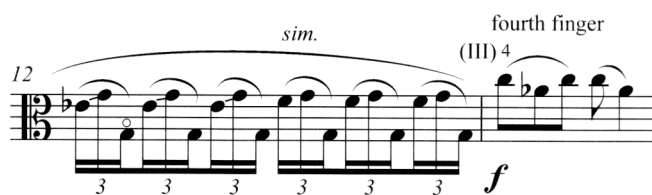


Example 1.111: Knox *Viola Spaces*, “One Finger,” mm. 36-39 (treble clef)



This etude will give students practice with finding notes in areas of the fingerboard they might be less comfortable with and in hearing notes in advance to guide the shift:

Example 1.112: Knox *Viola Spaces*, “One Finger,” mm. 12-13

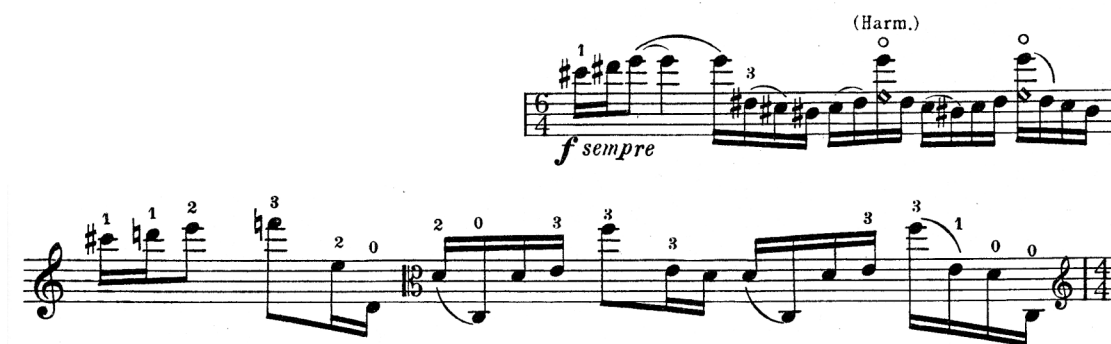


Example 1.113: Knox *Viola Spaces*, “One Finger,” mm. 52-53 (alto clef)



Accuracy with fast, big shifts is necessary for many pieces in the literature, especially in the Bartók Concerto. Several passages that require this skill are shown below:

Example 1.114: Bartók Concerto for Viola and Orchestra, movement I, mm. 37-38 (treble clef)



Example 1.115: Bartók Concerto for Viola and Orchestra, movement I, m. 113



Example 1.116: Bartók Concerto for Viola and Orchestra, movement I, m. 117 (treble clef)



Example 1.117: Bartók Concerto for Viola and Orchestra, movement II, mm. 37-45

Tempo I, ♩=69

poco rit. ten.

40

f *p* *poco f*

p *f*

Example 1.118: Bartók Concerto for Viola and Orchestra, movement III, mm. 13-21

II

20

sfz

Example 1.119: Bartók Concerto for Viola and Orchestra, movement III, m. 43 (treble clef)

f

Example 1.120: Bartók Concerto for Viola and Orchestra, movement III, mm. 255-258

Fast leaps also show up in *Der Schwanendreher*:

Example 1.121: Hindemith *Der Schwanendreher*, movement III, 5 before T to 1 before T (treble clef)



and the Walton Concerto:

Example 1.122: Walton Concerto for Viola and Orchestra, movement II, 8 after #36 to the end (alto clef)



Example 1.123: Walton Concerto for Viola and Orchestra, movement III, 3 after #62 to 7 after #62



Perhaps the most challenging big, fast leaps in the repertoire are in the Ligeti Sonata. In the “Loop” movement, these leaps aren’t so difficult at the beginning when the note values are longer (and therefore the succession of shifts slower), but by the last two trips around the loop, they push the bounds

of what is possible:¹¹⁹

Example 1.124: Ligeti Sonata for Viola Solo, movement II, mm. 79-92 (alto clef)

The musical score is written in alto clef (C4 on the third line) and consists of three systems. The first system shows measures 79-80 with dynamics *ff sub.* and *p sub.* The second system shows measures 81-84 with dynamics *f* and *ff sub. p sub.* The third system shows measures 85-92 with dynamics *ff* and *p sub.*, ending with the instruction "as if torn off wie abgerissen" and a final measure marked 8/16.

The fourth movement also has some extremely fast large leaps that are also nearly impossible (example 1.125). Obviously, in all of these cases, the accuracy of the specific shifts will have to be practiced to be reliable, but general comfort with shifting quickly over large distances to notes that may or may not be easy to hear will go a long way to making these passages less daunting and more consistent.

¹¹⁹ Of this movement, Garth Knox says that it stops when it does because the player/composer realizes that the next round of the loop would be impossible (Garth Knox, private lesson with the author, February 24, 2012).

Example 1.125: Ligeti Sonata for Viola Solo, movement IV, mm. 16-18

The musical score for Example 1.125 shows two staves of music. The first staff contains measures 16 and 17, while the second staff contains measures 17 and 18. The music is written in treble clef with a key signature of one sharp (F#). The notation includes various dynamic markings, articulation marks, and performance instructions. Boxed areas highlight specific passages: measures 16-17 on the first staff and measure 18 on the second staff.

Measure 16: *cresc.* *ffff* *pp sub.* *mf pp sim.* *f* *ff* *pp*

Measure 17: *mf* *f* *ff* *fff* *pp sub.* *mf pp sim.* *f p* *f p* *f p*

Measure 18: *mf* *f* *ff* *fff* *pp sub.* *mf pp sim.* *f p* *f p* *f p*

1.6. Harmonics

The use of harmonics, both natural and artificial, is nothing new in string writing. However, in expanding the sonic capabilities of string instruments, twentieth-century composers often demand more frequent, and more complex, harmonics than players are used to. For the natural harmonics, the exact note actually resulting from a given fingering is often a matter of confusion, both for players and composers, even though it is a logical result of the overtone series. Most string players are familiar with the natural harmonics that produce the first three overtones (octave, fifth, and double octave) because these are often the only ones asked for in the standard repertoire. Which fingers in which positions will also produce harmonics are often very mysterious, with the resultant pitches more mysterious still. In the case of artificial harmonics, most string players are unaware that a harmonic will result not only from placing the harmonic finger a fourth above the stopped pitch, but a third and a fifth as well, never mind which pitch will result from this. Compounding the problem is that players often see harmonics as unpredictable because they depend on optimal bow speed and weight, and precision in finger placement to sound. For stopped pitches, if the bow speed and weight are incorrect or the finger is in the wrong place, an ugly or out-of-tune note will result, but at least there is a sound. A faulty calculation in any of these parameters when playing harmonics results in a high pitched squeak, the airy sound produced by bow noise, or both, but not a recognizable pitch. In playing twentieth-century music, confidence and comfort with harmonics

is a necessity.

The first remedy for artificial harmonic-phobia is daily practice of harmonics in scales and arpeggios, with a variety of bowings. This will help accustom the student to the finger placement and bow technique necessary to play clear, reliable harmonics. Alfred Uhl also includes a harmonics etude, Etude No. 13, in his *20 Etudes*, which includes mostly artificial harmonics, but also some natural harmonics. This etude also includes the occasional artificial harmonic with the harmonic note a fifth above the stopped note, rather than the customary fourth:

Example 1.126: Uhl *Zwanzig Etüden für Viola*, Etude 13, mm. 1-8



These “fifth harmonics” are a very large stretch for some, so each violist will have to find a way of playing them that works for their hand without causing pain and discomfort. Garth Knox advocates bringing the left thumb as far forward as possible because this has the effect of allowing the hand to open wider, like the hinged jaw of a snake.¹²⁰ Extending the thumb backwards, as many are tempted to do, actually prevents this opening and causes increased strain on the wrist. Learning how to play “fifth harmonics” accurately and comfortably is essential for playing the fifth movement of the Ligeti Sonata. In this movement, the composer writes double-stop harmonics, one a fifth above the stopped note, one a fourth above (example 1.127).

¹²⁰ Garth Knox, private lesson with the author, February 16, 2012.

Example 1.127: Ligeti Sonata for Viola Solo, movement V, mm. 56-58 (bottom two staves: alto clef; top staff: treble clef)

This can seem impossible to many violists, especially those with smaller hands, if they have not learned how to stretch this distance safely. Uhl's etude, with its occasional fifth harmonics, is good preparation for this. Some limited practice of fifth harmonics in scales is also helpful, but violists should be aware that any large stretch practiced for too long can be a strain on the wrist and potentially harmful. Therefore, scalar practice of fifth harmonics, as well as those in the Uhl etude (and the Ligeti passages), should be done with a strict time limit.

The Ligeti movement also brings up another issue: double-stop harmonics. Playing harmonics in double-stops can be challenging, not only for the left hand, but also for the bow. The resistance of the strings is much less when playing harmonics versus stopped notes and this can make it difficult to play both strings equally in double-stop harmonics because it's harder to feel both strings. Playing scales in double-stop artificial harmonics can help develop this ability (see Appendix 2 for these scales).

Additionally, Garth Knox has included a harmonics etude, "Harmonic Horizon" in his collection of etudes dealing with extended techniques, *Viola Spaces*. This etude is very challenging and deals with all the possible harmonics a player might encounter in contemporary music. Once a player has mastered this etude, she will have an excellent understanding and command of harmonics. One of the benefits of this etude is that Knox provides the resultant pitches from all of the harmonics, written in a smaller line above

the staff. The middle section of this etude is almost entirely in double-stop harmonics and the resultant pitch line is very helpful in aiding the player to make sure the correct pitches are coming out:

Example 1.128: Knox *Viola Spaces*, “Harmonic Horizon,” mm. 26-43

$\text{♩} = 60$

26 ^{8^{va}} til bar 67 / his Taki 67

“trembling” harmonics

p

32

37 $\text{♩} = 40$

falling harmonics

pp

40

sul II

sul pont.

pp *sim.* *ppp*

43

As can be seen from this excerpt, it also includes practice in artificial harmonics where the harmonic finger is a third and a fifth above the stopped note (for example, measure 38).

In addition to practice in double-stop harmonics, this etude explores the entire harmonic range of the viola and therefore is excellent preparation for the end of the first movement of the Ligeti Sonata:

Example 1.129: Ligeti Sonata for Viola Solo, movement I, mm. 32 to the end (alto clef)

The musical score is written in alto clef and consists of three staves. The first staff shows measures 32-33 with a melodic line and a lower line of harmonics. The second staff shows measures 34-36 with a similar texture. The third staff shows measures 37-38, ending with a final chord. Dynamics include *mf*, *p*, *poco a poco dim.*, and *ppp morendo*. Performance instructions include *senza vibr.* and *p „da lontano“*.

Knox's etude starts with all the harmonics up to the tenth overtone, both at the low end and the high end of the C string (example 1.130). Most violists (and string players in general) don't realize that the same harmonics can be found at both ends of the string. The passage from measures six through ten walks through many of the same pitches asked for at the end of the first movement of the Ligeti Sonata. The challenge in the Ligeti is to get the individual pitches to speak when they are supposed to without errant pitches marring the melody. Given how close together these harmonics are (this passage is well beyond the end of the fingerboard), this is quite a challenge.¹²¹ In his etude, Knox includes a passage that is

¹²¹ Knox advocates playing this passage with the nail of the first or second finger next to the string and not switching fingers for the individual notes. This allows for much more precision than fat fingertips (Garth Knox, private lesson with the author, March 1, 2012).

harder than what is asked for in the Ligeti (example 1.131), which is to be played high on the C and G strings, past the end of the fingerboard. It is only possible if the second or third finger (whichever is best for the individual player) is “hooked” onto the G string and another free finger (second if hooking with the third, first and third if hooking with the second) dances around to get the pitches on the C string. After playing this etude, the end of the Ligeti is quite easy by comparison!

Example 1.130: Knox *Viola Spaces*, “Harmonic Horizon,” mm. 1-10

$\text{♩} = 52$ slow, very free

resulting pitches

fingered pitches

Harmonic finger pressure always

bow rhythm

sul IV

10

Example 1.131: Knox *Viola Spaces*, “Harmonic Horizon,” mm. 60-68

60 *mf* 2 3

63 *cresc.*

66

(open D string)

This etude also includes some practice in playing double-stops between harmonics and non-harmonics:

Example 1.132: Knox *Viola Spaces*, “Harmonic Horizon,” m. 11 (bottom staff: alto clef, top staff:

treble clef)

p

This type of double-stop involving harmonics can be a challenge because of the differing needs of the string with the harmonics and the string without the harmonics. It is an issue violists must deal with at the end of the Penderecki *Cadenza*:

Example 1.133: Penderecki *Cadenza per viola sola*, penultimate line to the end



This passage is the source of a lot of stress amongst the many violists who perform this piece. Most play the open G as a grace note before the harmonic, rather than sustaining it for the duration marked. This is a reasonable solution since the open G continues to ring during the harmonic, but negotiating the change from a “normal” note to a harmonic is still a challenge. Knox provides practice in this as well (note here that the stopped note and the harmonic are on the same string, not different strings as in the Penderecki):

Example 1.134: Knox *Viola Spaces*, “Harmonic Horizon,” mm. 22-25

The most important ingredient in playing harmonics successfully is confidence. This confidence comes from understanding how harmonics work and what they need from the bow to speak reliably. Only daily practice in harmonics will give this confidence. For a violist working on either the Ligeti or the Penderecki, concurrent practice of harmonics in scales and the etudes by Uhl and Knox should be a priority.

1.7. Quartertones

Not only does twentieth-century music generally reject tonality and traditional harmonic structures, but composers are increasingly expanding the palette of the very notes that can be used. In the standard Western musical tradition, the smallest space between two notes is a half-step. Twentieth-century composers began writing notes “in the cracks” that fall between two half-steps, known as quartertones. For most Western listeners, quartertones simply sound out of tune. With practice, however, the ear can be trained to hear them as discrete pitches. Although there are many contemporary pieces for viola that include quartertones, they are unusual in the standard repertoire. One notable exception is the first movement of the Ligeti Sonata. It should be noted here that the deviations from standard pitch in this movement aren’t actual quartertones: the altered pitches conform to the natural overtones of the pitch F. One of the altered pitches, B (and later F-sharp) is nearly a quartertone (it is 49 cents flat, to correspond with the 11th harmonic). The others, A and E-flat being the most frequent, are altered by different amounts, as detailed by Ligeti in the explanatory note at the bottom of the movement. The hardest altered pitch to play and hear, however, is the 49-cents-flat B because it falls in between B-flat and C, whereas the other altered notes are closer to familiar pitches. Often, the altered B just sounds out of tune and is often played that way. When the “out of tune” pitches are played in tune in the way Ligeti indicated, there is a beautiful clarity and simplicity to this movement that is lost when the altered pitches are simply played out of tune.

Example 1.135: Ligeti Sonata for Viola Solo, movement I, mm. 1-9

$\frac{12}{16}$ sempre sul IV - al fine

p molto espr. *mf* *p* *mf* *p*

4 *poco f* *p* *mf*

7 *f* *p* *mf*

Before students attempt this movement, they should learn and perfect the quartertone etude “In between” from Garth Knox’s *Viola Spaces*. In his notes on playing this etude, he notes that the note C-quarter-sharp (the first quartertone encountered in the study) is placed right in between B and D, “actually the most natural place for it to fall.”¹²² Playing the opening of this etude, the violist realizes that he is right: the asymmetrical finger placement we are all used to (second finger right next to B for C-natural, or right next to D for C-sharp) is less natural than a more symmetrical finger placement where the fingers are all evenly spaced:

Example 1.136: Knox *Viola Spaces*, “In between,” mm. 1-4

$\text{♩} = 50$ Tranquillo, rubato

p *p*

4

¹²² Garth Knox, notes to *Viola Spaces* (Mainz, Germany: Schott, 2009), 5.

This etude is extremely well-written from a pedagogical standpoint (and it is satisfying musically as well) because this contrast between normal placement and quartertone placement is always made explicit. In the opening phrase above, the violist first practices C-sharp, then C-natural, then the contrast between them, and then finally C-quarter-sharp, right in between. In the note, Knox says

The first thing to learn is what a quartertone sounds like, so one can imagine the pitch of it before it is played (the key to all good intonation). And the way to get to this point is to know what a quartertone feels like.¹²³

The experience of learning this etude is exactly that: at first you play by feel alone (as in the example of the first phrase) and it just sounds out of tune, but as the feeling becomes more secure, you begin to be able to hear the quartertones as notes in their own right, not out-of-tune versions of the “correct” pitches. The end of this etude includes a reference to the Ligeti Sonata (compare the Knox below to the first measure of the Ligeti above):

Example 1.137: Knox *Viola Spaces*, “In between,” mm. 71-73 (alto clef)



Every phrase in the Ligeti starts with this motive, so gaining confidence with the finger placement and pitch in this figure will go a long way towards improving the intonation of the movement as a whole. Once Knox’s etude is mastered, the violist’s ears will be more open and more sensitive to the space between traditional Western pitches. This is absolutely necessary if one is to play the Ligeti well. Otherwise, it’s just out of tune.

¹²³ Ibid.

Chapter 2: Rhythm

Just as twentieth-century composers often reject the confines of tonality, they also reject the confines of predictable and symmetrical meters and rhythms. In non-Western cultures, asymmetrical meters, where the length of the beats is unequal, are common in folk and other traditional music.¹²⁴ In the West, however, our folk music and art music (until the twentieth century) never includes asymmetrical meters (known as complex or mixed meters) and consequently, Western adults have difficulty processing them.¹²⁵ Musicians who play twentieth-century music, however, need to be comfortable with mixed meters because they are very common. Because we in the West don't grow up with these types of meters, it is very difficult for us to "feel" them.¹²⁶ Unfortunately, most musicians can get away with not subdividing in traditional classical music; they can play rhythms accurately purely by feel. Because of this, when confronted with music that requires subdivision (like music in mixed meters that they cannot feel), their subdividing abilities are found to be severely under-developed. This doesn't just pose a problem for music in mixed meters, however. Twentieth-century composers often write rhythms that undermine the meter and/or purposefully create a sense of rhythmic ambiguity. In these cases, subdivision is essential as well.

Related to asymmetrical meters are irregular groupings of notes that fit within a beat. In traditional Western music, the only subdivisions used are two, three, four, six, and sometimes eight or nine notes per beat. The larger groupings, six, eight, and nine notes per beat, can be felt in terms of the smaller groupings if necessary (six notes per beat can be felt as two groups of three or three groups of

¹²⁴ For example, see S. Petrov, M. Manolova, and D. A. Buchanan, "Bulgaria," *Grove Music Online*. *Oxford Music Online*, <http://www.oxfordmusiconline.com.ezproxy.rice.edu/subscriber/article/grove/music/04289> (accessed October 3, 2012)

¹²⁵ Processing in this context refers to the ability to accurately perceive something (in this case, the meter of a piece). Erin E. Hannon and Sandra E. Trehub, "Metrical Categories in Infancy and Adulthood," *Psychological Science* 16 (2005): 48-55.

¹²⁶ Infants can process symmetrical and asymmetrical meters equally, regardless of which culture they are born into. Through enculturation, Western infants gradually lose this ability, whereas non-Western infants in cultures whose music includes asymmetrical meters don't (Hannon and Trehub, "Metrical Categories," 2005; Erin E. Hannon and Sandra E. Trehub, "Tuning in to Musical Rhythms: Infants Learn More Readily than Adults," *Proceedings of the National Academy of Sciences U.S.A.* 102 (2005): 12639-12643.)

two; eight notes per beat can be felt as two groups of four; nine notes per beat can be felt as three groups of three). In twentieth-century music, composers often write a more unusual number of notes per beat: five, seven, ten, eleven, etc. These cannot be felt in terms of smaller symmetrical groupings, and so players often struggle to play them at the right speed or to play all the notes of equal length. More challenging still is playing a certain number of notes “over” more than one beat: four notes in the space of three beats or five notes in the space of two beats, for example. Playing these rhythms accurately requires the player to feel the larger beat structure (i.e., every two beats rather than every beat) and fit the subdivisions in equally.

These rhythmic abilities are not required in the standard repertoire in the same way they are in twentieth-century music for most musicians (although being able to subdivide accurately is a skill every musician should possess and use for all types of music). For violists, our standard repertoire does require these skills, but unfortunately, they are often as under-developed in violists as in other musicians.

2.1. Mixed meter

Fortunately, there are a number of good etudes in mixed meters to help develop the ability to subdivide and also feel these asymmetrical beat lengths. Alfred Uhl’s easier book of etudes, *Dreißig Etuden für Viola*¹²⁷ (30 Etudes for Viola) includes two in mixed meter, one in 5/8 (No. 6, example 2.1) and the other in 7/8 (No. 30, example 2.2). Both etudes change how the notes are grouped throughout the etude. For instance, No. 6 starts with 3+2, but switches to 2+3 in measure 4. Similarly, No. 30 starts with 3+2+2 (or 3+4) and switches to 2+3+2 in measure 11 and then again to 2+2+3 in measure 13. It is important to practice feeling these different possible subdivisions of the meters since there is no standard subdivision, and violists will encounter all of them in the literature. Each of these etudes only has one rest, and the ties only occasionally extend over the bar line (this only happens in No. 6). Once a student has mastered these etudes, he should be given Etude No. 6 from Uhl’s other book, the *Zwanzig Etuden*,

¹²⁷ Alfred Uhl, *Dreißig Etuden für Viola* (Mainz, Germany: Schott, 1975).

which is also in 5/8 (example 2.3). This etude includes more rests and more notes that carry over the bar line, requiring even more active subdivision.

Example 2.1: Uhl *Dreißig Etüden für Viola*, Etude No. 6, mm. 1-15

Example 2.2: Uhl *Dreißig Etüden für Viola*, Etude No. 30, mm. 1-16

Example 2.6: Martinu *Rhythmic Etudes*, Etude No. 1, mm. 1-11

Allegro

Violon

Piano

(mf)

Example 2.7: Martinu *Rhythmic Etudes*, Etude No. 7, mm. 1-8

Allegretto

p

p

mf

mf

There are several instances in the standard viola repertoire where comfort with mixed meters is necessary. Of the six movements in the Ligeti Sonata, three are written in mixed meters. The most challenging is the second movement. Ligeti unhelpfully writes that the meter alternates between 8/16 (as 5+3) and 10/16 (as 4+6), with a tempo marking of 320 to the sixteenth note. These markings cause many violists to subdivide sixteenth notes, giving their performance an odd, jerky feel. Ligeti writes in the notes that this movement should have a jazzy feel, but subdividing by the sixteenth note does not accomplish

that. Much better is to subdivide eighth notes; it is only then that the syncopations become clear. Below is the opening of this movement with the eighth note subdivisions written under the staff for clarity:

Example 2.8: Ligeti Sonata for Viola Solo, movement II, mm. 1-8 with 8th notes

Students who don't have experience with mixed meters and/or active subdivision will likely have a difficult time with this movement, so preparation with the above etudes should be a priority. The third movement of the Ligeti Sonata is almost entirely in 5/8 with occasional bars of 7/8. Although the tempo of this movement is on the slow side, students unfamiliar with playing in mixed meters will often unintentionally make this movement in 6/8 and 4/4. Below is what Ligeti wrote and another version with common metrical mistakes:

Example 2.9: Ligeti Sonata for Viola Solo, movement III, mm. 1-8

Example 2.10: Ligeti Sonata for Viola Solo, movement III, mm. 1-8 re-written with common mistakes



The fifth movement is likewise in 5/8 and 7/8. Because most of the note values in this movement are longer than an eighth note, subdivision is imperative:

Example 2.11: Ligeti Sonata for Viola Solo, movement V, mm. 1-12

senza sord., alla corda

subito: **fff** con tutta la forza, feroce

7

sul tasto, flautando

pp da lontano

ord.

sub. **fff** (feroce)

The fourth movement of the Ligeti Sonata is in 12/8, but because of the placement of the accents and the speed, it sounds like it is in a mixed meter. Garth Knox suggests adding in large bar lines before each accent so the groupings are more visually clear.¹³⁰ Played at a fast enough speed with the *pianissimo* notes truly *pianissimo*, this movement should sound like a dance in alternating bars of 7 and 5, at least for the first part (example 2.12).

¹³⁰ Garth Knox, private lesson with the author, March 1, 2012.

notorious amongst violists and is marked quarter note = 600-640, with all of the notes in the movement being quarter notes. For each bar, a small number is marked above the staff indicating the number of notes in each bar. The division of the bar into groups is determined by the placement of the double-stops in each measure:

Example 2.14: Hindemith Sonata for Solo Viola op. 25, no. 1, movement IV, mm. 1-12

(♩ = 600 - 640)
 Rasendes Zeitmaß. Wild. Tonschönheit ist Nebensache. (Die Ziffern geben an, wieviel Viertel sich zwischen zwei Taktstrichen befinden.)

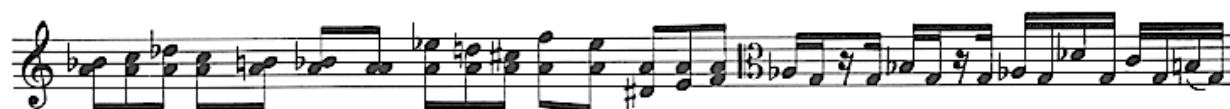
Peter Slowik advocates preparing for this movement in the following way. Away from the instrument, the student is to clap the rhythm created by the chords (so silence on the low Cs, a clap on each chord). Once this is comfortable and the student has learned the notes of the double-stops, the next step is to play just the chord (no Cs) in rhythm with the correct bowing. Once this is comfortable, then it can be practiced as written, starting slowly. The challenges of this movement are three-fold: the correct rhythm, the correct notes, and dealing with fatigue. Often, students who play this piece have had little prior experience with twentieth-century music. The mixed meters feel uncomfortable to them because their bow arm is used to playing symmetrical groupings. In addition to Mr. Slowik's preparatory exercises, some of the *Rhythmic Etudes* discussed above should be studied.

The issue of fatigue is largely unique to this movement; the other piece in which fatigue is a major issue is the Berio *Sequenza*, discussed below, but the challenges of that are different than the

challenges in this. A full discussion of ways to mitigate fatigue in this movement is largely outside the scope of this dissertation, unfortunately.

The final piece in the standard repertoire to be discussed here that contains metrical challenges is the Penderecki *Cadenza*. Here, the issue is somewhat different since this piece is written without bar lines. Because there are no bar lines, Penderecki uses beaming to show groupings. Students may be tempted to play groups of threes like triplets and groups of twos like eighth notes, but this is not correct (Penderecki very clearly marks triplets when he wants triplets):

Example 2.15: Penderecki *Cadenza per viola sola*, pg. 2 last line



These metrical issues are not nearly as hard as many of those discussed above, but for a student unaccustomed to playing asymmetrical groupings, it will add an unnecessary and avoidable level of difficulty.

2.2. Irregular subdivisions

Even when composers write in more standard time signatures, the way the beats are divided may not be conventional. Specifically, twentieth-century composers often divide the beat into five, seven, eleven, and other tuplets¹³¹ that cannot be thought of in smaller symmetrical groups, as well as writing longer tuplets that occur over more than one beat (four notes over three beats, for instance). It is important that violists be as comfortable with a quintuplet as a triplet, and a quarter note quadruplet as a quarter note triplet. Often, however, rhythms such as these are a source of bafflement and performance is inaccurate

¹³¹ “Tuplets” is the generic word generally used to describe subdivisions of the beat that are not “native” to the particular time signature. In 4/4, triplets are a form of tuplet, just as duples are a tuplet in 6/8.

and uneven. To help student gain comfort and confidence with unconventional tuplets, Carol Rodland advocates practicing scales and arpeggios in these rhythms. For many students, practicing scales in groups of fives is difficult. When done correctly, the scale should be played five times around before the starting pitch at the bottom is again the start of a slur. This and the other scales described here are shown in Appendix 2. Additionally, students should practice arpeggios slurred in other than multiples of three, such as slurring in groups of four, five, and seven. This not only tests whether students know their arpeggios thoroughly, but also makes them more comfortable with less standard groupings. Finally, students should practice scales alternating tuplets within the scale, such as one bow of triplets, one bow of quintuplets (also shown in Appendix 2). This exercise should be done with the metronome, with the goal being evenness and rhythmic accuracy.

There are two etudes that also address this issue. The first has already been discussed in the context of non-tonal scales: No. 3 in Uhl's book of 20 etudes. This etude includes scales in groupings of five, seven, eight and nine, with most being groups of five or seven:

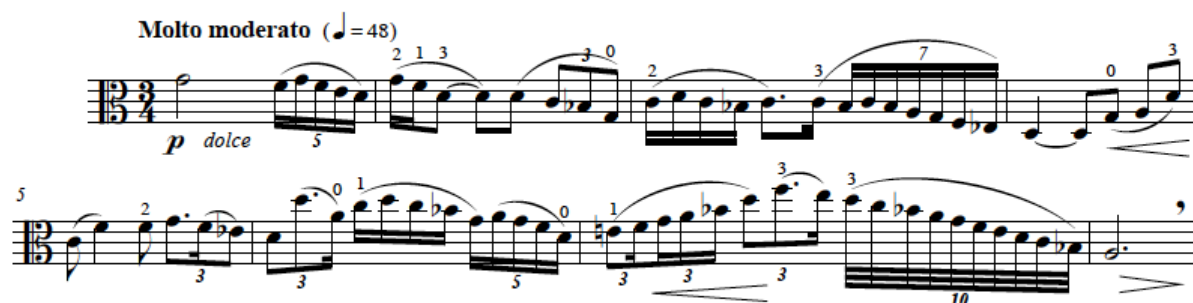
Example 2.16: Uhl *Zwanzig Etüden für Viola*, Etude No. 3, mm. 10-17



The other is the “Irregular Subdivisions of the Beat” study by Michael Kimber. This study includes every possible subdivision of the beat from two through eleven (example 2.17).

Example 2.17: Kimber 20th-Century Idioms for Violists, Irregular Subdivisions of the Beat study,

mm. 1-8



This etude is beautiful and reminiscent of Rebecca Clarke's writing. It calls for a fluidity of phrasing while maintaining accuracy. As such, it is excellent preparation for Rebecca Clarke's Sonata, which has many instances of irregular subdivisions of the beat. Some examples are shown below:

Example 2.18: Clarke Sonata for Viola and Piano, movement I, mm. 5-6 (alto clef)



Example 2.19: Clarke Sonata for Viola and Piano, movement I, #7 to 5 after #7 (alto clef)



Example 2.20: Clarke Sonata for Viola and Piano, movement III, 6 after #29 to 8 after #29



Example 2.21: Clarke Sonata for Viola and Piano, movement III, 6 before #36 to #36



Irregular tuplets also show up in *Der Schwanendreher*:

Example 2.22: Hindemith *Der Schwanendreher*, movement I, 5 before M to 2 before M (alto clef)



the Bartók Viola Concerto:

Example 2.23: Bartók Concerto for Viola and Orchestra, movement I, mm. 19-20



Example 2.24: Bartók Concerto for Viola and Orchestra, movement I, mm. 141-142 (treble clef)

Example 2.25: Bartók Concerto for Viola and Orchestra, movement II, mm. 10-11 (treble clef)

Hindemith's Sonata op. 25, no. 1:

Example 2.26: Hindemith Sonata for Solo Viola op. 25, no. 1, movement I, mm. 39-41 (alto clef)

and Hindemith's Sonata op. 11, no. 4:

Example 2.27: Hindemith Sonata for Viola and Piano op. 11, no. 4, movement I, 4 before #2 to 3 after #2

Example 2.27 shows a musical score for the Sonata for Viola and Piano, op. 11, no. 4, movement I. The score is in B-flat major and 3/4 time. It features a Viola part (top staff) and a Piano part (bottom staff). The Viola part begins with a melodic line marked *mp* and *Im Zeitmaß*. The Piano part provides harmonic support with chords and arpeggios. The score includes dynamic markings such as *p*, *mf*, *cresc.*, and *sempre cresc.*. A circled '2' indicates a second ending or measure.

Example 2.28: Hindemith Sonata for Viola and Piano op. 11, no. 4, movement II, 1 before #13 to #13

Example 2.28 shows a musical score for the Sonata for Viola and Piano, op. 11, no. 4, movement II. The score is in D major and 2/4 time. It features a Viola part (top staff) and a Piano part (bottom staff). The Viola part begins with a melodic line marked *f* and *cresc.*. The Piano part provides harmonic support with chords and arpeggios. The score includes dynamic markings such as *mf* and *f*. A circled '13' indicates measure 13.

Example 2.29: Hindemith Sonata for Viola and Piano op. 11, no. 4, movement III, 7 before #14 (alto clef)

Example 2.29 shows a musical score for the Sonata for Viola and Piano, op. 11, no. 4, movement III. The score is in D major and 2/4 time. It features a Viola part (top staff) and a Piano part (bottom staff). The Viola part begins with a melodic line marked *f*. The Piano part provides harmonic support with chords and arpeggios.

Example 2.30: Hindemith Sonata for Viola and Piano op. 11, no. 4, movement III, 4 after #28 to 5 after #28



In all of these examples, the triplets in question are slurred and therefore should flow easily. In many of these examples, the viola is not playing alone and so the triplet needs to arrive at the next beat on time. Students who are not used to playing irregular subdivisions will likely make the notes quite uneven (either too fast or too slow at the beginning of the figure) or their effort to play evenly will sound pedantic and unmusical. Because rhythms like this occur so often in the standard repertoire, violists should practice these types of subdivisions regularly in their scales, arpeggios, and through the studies mentioned above.

The other type of triplets violist will encounter in twentieth-century music are those that span more than one beat. Unfortunately, there are no etudes that deal with this issue, but these types of triplets can still be practiced in scales and arpeggios. When practicing triplets over more than one beat, violists should always use a metronome to ensure accuracy. Some sample scales in these types of triplets are included in Appendix 2. Although not as numerous as irregular subdivisions of the beat, these triplets do occur in the standard literature. Some examples are below:

Example 2.31: Bartók Concerto for Viola and Orchestra, movement II, mm. 21-22 (alto clef)



Example 2.32: Hindemith Sonata for Viola and Piano op. 11, no. 4, movement III, 6 after #25 to 9 after #25 (see also the analogous spot after #14)



Example 2.33: Hindemith Sonata for Viola and Piano op. 25, no. 4, movement I, mm. 122-127

This musical score snippet covers measures 122 through 127. Measures 122-125 are shown in a single system, while measures 126-127 are in a second system. The top staff is for the Viola, and the bottom staff is for the Piano. The Viola part includes a five-measure rest in measure 122 and dynamic markings of *f* and *poco f*. The Piano part features a steady eighth-note accompaniment with dynamic markings of *poco f* and *cresc.* (crescendo). The key signature has three flats, and the time signature is 3/4.

For these to be played evenly and accurately, a student should have prior familiarity and comfort with playing these kinds of rhythmic figures, which are often hard to feel.

2.3. Subdivision (non-mixed meter)

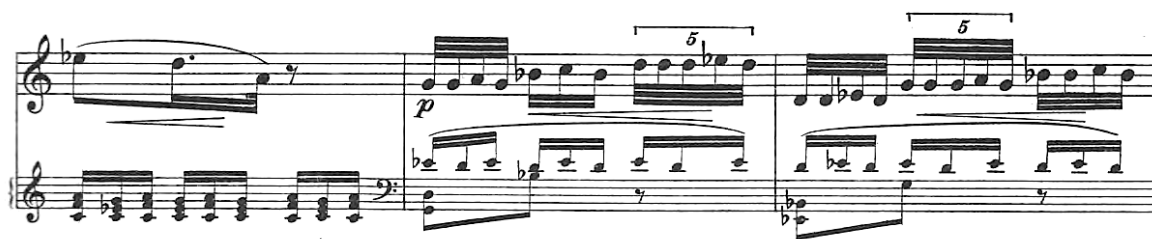
As discussed above, the subdivision abilities of most string players are very under-developed. Since the rhythms in much of tonal music are predictable and easy to feel and memorize by ear, subdivision is often not required in the same way as it is in twentieth-century music. Although active subdivision can often improve performance in pre-twentieth-century music, it is usually still possible to play the correct rhythm without subdividing. In twentieth-century music, this is often not the case. Like anything else, subdividing actively needs to be practiced. In addition to the mixed meter etudes described above, there are etudes by Uhl and Martinu that require active subdivision, but are in common meters. Etude No. 6 in the *Rhythmic Etudes* by Martinu is entirely in 4/4, but contains a number of syncopations and cross-accents, as implied by the title, “Jazz rhythmus:”

Example 2.34: Martinu *Rhythmic Etudes*, Etude No. 6, mm. 1-16

The image displays a musical score for Martinu's *Rhythmic Etude No. 6*, measures 1 through 16. The score is written for a single melodic line, likely for a string instrument, in 4/4 time. It is presented in a grand staff format with a treble clef on the upper staff and a bass clef on the lower staff. The music is characterized by frequent syncopations and cross-accent patterns, which are typical of jazz-influenced compositions. The notation includes various rhythmic values such as eighth and sixteenth notes, as well as rests, and features dynamic markings like *f* (forte) and *mf* (mezzo-forte). The key signature is one flat (B-flat major or D minor). The score is divided into four systems, each containing two staves. The first system covers measures 1-4, the second system covers measures 5-8, the third system covers measures 9-12, and the fourth system covers measures 13-16. The music concludes with a double bar line at the end of measure 16.

Etude No. 5 from this same collection is entirely in 3/8, but presents many rhythmic challenges. Not only are various “standard” subdivisions of the beat used, but there are also quintuplets, both within one beat and over three beats:

Example 2.35: Martinu *Rhythmic Etudes*, Etude No. 5, mm. 12-14



Example 2.36: Martinu *Rhythmic Etudes*, Etude No. 5, mm. 34-38



A student who could play this difficult etude successfully would be well prepared for any rhythmic challenges found in the literature.

In addition, there are two etudes from Uhl’s book of 20 etudes: No. 10 and No. 20. Etude No. 10 is in 12/8, but rather than being entirely in four groups of three, there are occasional measures in six groups of two (effectively 6/4 meter). Also, in the purely 12/4 measures, there are many dotted rhythms, with the placement of the dot switching position from one note to another throughout the etude. Successful performance of this etude requires the player to feel the eighth note throughout and to pay close attention to what is written so as not to play the “Sicilienne” rhythm (dotted eighth, sixteenth, eighth) when it is not written:

Example 2.37: Uhl *Zwanzig Etüden für Viola*, Etude No. 10, mm. 7-12



Similar issues are addressed in Etude No. 20. Here, the entire etude is in 3/8, but syncopations within the bar and over the bar line make it difficult to feel the rhythm without subdividing:

Example 2.38: Uhl *Zwanzig Etüden für Viola*, Etude No. 20, mm. 1-14



Example 2.39: Uhl *Zwanzig Etüden für Viola*, Etude No. 20, mm. 37-52



These four etudes will give students increased practice and confidence in subdividing so that when they encounter rhythms in the literature that require active counting, they will be able to do so without sounding mechanical or broadcasting the subdivision in their bow. Two spots in the standard viola repertoire that often show very clearly when a student is inexperienced with active subdivision are below:

Example 2.40: Hindemith Sonata for Viola and Piano op. 11, no. 4, movement III, 7 after #29 to 12 after #29 (also see the analogous spot after #20)



Example 2.41: Walton Concerto for Viola and Orchestra, movement III, 1 before #64 to 2 after #64

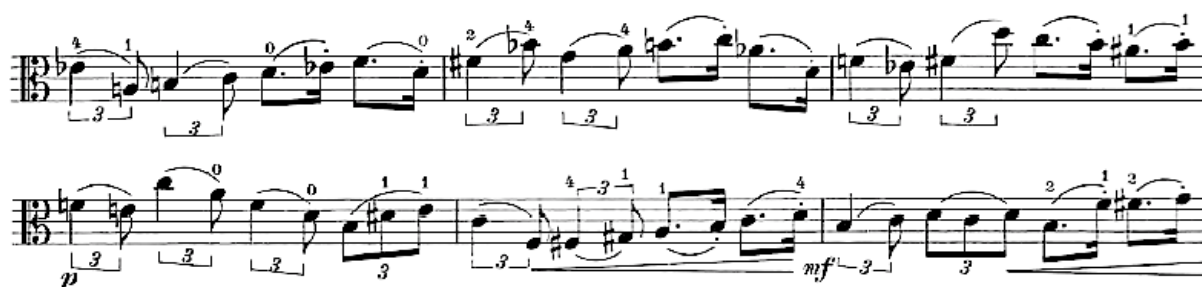


Often when these two examples are performed, there are bumps in the bow as the student unconsciously reinforces their internal subdivisions and/or the rhythm is not correct. However, having practiced any of the etudes discussed in this section, a student will find the above examples to be rhythmically quite easy, which is the goal of etudes after all: to deal with technical challenges away from the performance repertoire so that they are no longer challenges when playing this repertoire.

2.4 Differentiating similar rhythms

The final rhythmic challenge is something often encountered in Hindemith's music: making sure the dotted eighth-sixteenth rhythm doesn't sound like a triplet. Hindemith often juxtaposes triplets and dotted rhythms and since violists play Hindemith so often, this is a rhythm consideration that violists have to pay particular attention to. Etude No. 25 from Uhl's book of 30 Etudes seems to have been expressly written as preparation for Hindemith:

Example 2.42: Uhl *Dreißig Etüden für Viola*, Etude No. 25, mm. 13-18



Etude No. 14 from the book of 20 Etudes addresses a slightly different issue, but is still good practice in differentiating triplets from duples:

Example 2.43: Uhl *Zwanzig Etüden für Viola*, Etude No. 14, mm. 29-36

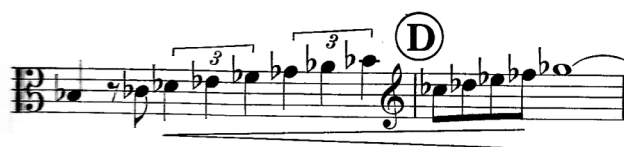


Der Schwanendreher contains many instances of duples juxtaposed with triples. Some of these are shown below:

Example 2.44: Hindemith *Der Schwanendreher*, movement I, mm. 5-9 (treble clef)



Example 2.45: Hindemith *Der Schwanendreher*, movement I, 1 before D to D



Example 2.46: Hindemith *Der Schwanendreher*, movement I, 8 before T to 2 after T



Example 2.47: Hindemith *Der Schwanendreher*, movement III, D to 3 before E (treble clef)



Example 2.48: Hindemith *Der Schwanendreher*, movement III, 1 after Q to 4 before R (treble clef)



Example 2.49: Hindemith *Der Schwanendreher*, movement III, S to 4 before U



This issue also comes up in the Bartók Concerto:

Example 2.50: Bartók Concerto for Viola and Orchestra, movement I, m. 33 (treble clef)



Example 2.51: Bartók Concerto for Viola and Orchestra, movement I, m. 48-49



Hindemith Sonatas op. 25, no. 1 and op. 11, no. 4 (note the piano part in the example from op. 11, no. 4):

Example 2.52: Hindemith Sonata for Solo Viola op. 25, no.1, movement I, mm. 20-21 (treble clef)



Example 2.53: Hindemith Sonata for Solo Viola op. 25, no.1, movement II, mm. 1-8



Example 2.54: Hindemith Sonata for Solo Viola op. 25, no.1, movement III, mm. 29-32 (treble clef)



Example 2.55: Hindemith Sonata for Viola and Piano op. 11, no. 4, movement III, 7 after #32 to 4

before #33

Wild

fff

fff

mf

mf

cresc. molto

cresc. molto

and the Clarke Sonata (note the piano part in the final excerpt):

Example 2.56: Clarke Sonata for Viola and Piano, movement I, #1 to 7 after #1 (treble clef)

Example 2.56 shows a musical score for the first movement of the Clarke Sonata for Viola and Piano. The score is written for Viola (treble clef) and Piano (bass clef). The tempo is marked *Poco agitato.* The key signature has one flat (B-flat). The score includes dynamic markings *f* (forte) and *p* (piano). The Viola part features a melodic line with slurs and accents, while the Piano part provides a harmonic accompaniment with slurs and accents. The score is divided into two systems, with the first system starting at measure 1 and the second system starting at measure 7.

Example 2.57: Clarke Sonata for Viola and Piano, movement III, #33 to 5 after #33 (alto clef)

Example 2.57 shows a musical score for the third movement of the Clarke Sonata for Viola and Piano. The score is written for Viola (alto clef) and Piano (bass clef). The tempo is marked *Agitato.* The key signature has one flat (B-flat). The score includes dynamic markings *fp sempre* (fortissimo piano sempre) and *p* (piano). The Viola part features a melodic line with slurs and accents, while the Piano part provides a harmonic accompaniment with slurs and accents. The score is divided into two systems, with the first system starting at measure 33 and the second system starting at measure 38.

Example 2.58: Clarke Sonata for Viola and Piano, movement III, 5 after #40 to the end

Example 2.58 shows a musical score for the third movement of the Clarke Sonata for Viola and Piano. The score is written for Viola (alto clef) and Piano (bass clef). The tempo is marked *molto allarg.* (molto allargando). The key signature has one flat (B-flat). The score includes dynamic markings *pp* (pianissimo), *string.* (string), *molto cresc.* (molto crescendo), *rit.* (ritardando), *ff* (fortissimo), and *secco* (secco). The Viola part features a melodic line with slurs and accents, while the Piano part provides a harmonic accompaniment with slurs and accents. The score is divided into two systems, with the first system starting at measure 45 and the second system starting at measure 50. The score ends with a double bar line and a fermata.

Although this isn't a new rhythmic issue in twentieth-century music, as mixed meter and irregular subdivisions of the beat often are, the juxtaposition of triplets and duples occurs much more frequently, especially in the standard viola repertoire. Violists should be able to switch effortlessly between triples and duples and to make a clear difference between dotted rhythms and triplets. When these two kinds of rhythms are homogenized, the music loses much of its character and power.

Chapter 3: Extended Techniques

In the introduction to his book of etudes, *Viola Spaces*, Garth Knox writes:

When young musicians start to play contemporary music, many of them are discouraged by the complexity of what they are asked to do, and are ready to abandon the piece because it is “too difficult.” I think the real problem is that there are too many problems all at the same time – notation, rhythm, unfamiliar symbols, and an array of seemingly “new” techniques, all to be tackled simultaneously. It struck me that a collection of studies which deals with these techniques one by one would show that most of them are so-called secondary techniques already present in classical music and are not actually new at all, just carried a little further. And that spending a little time on each one brings great benefits to general technique, not only for playing new music.¹³²

This section will deal with these so-called “extended techniques.” Three of the etudes, the one on glissandos, the one on quartertones and the one on harmonics, have already been discussed. Of the remaining five, the extended techniques they deal with are either not asked for very often in the standard viola repertoire or are not asked for at all. However, practicing these studies will increase a violist’s technical capabilities, both for new music and in general, and will allow students to tackle a wider variety of repertoire with confidence and expertise.

3.1. *Sul ponticello*

Sul ponticello, or playing next to the bridge (although it literally means playing on the bridge), is not a new effect. Beethoven used it in his String Quartet op. 131 and Berlioz used it in his famous “March to the Scaffold” in *Symphonie Fantastique*. Before them, Haydn and Boccherini occasionally called for it as well.¹³³ Playing next to the bridge brings out the high harmonics, producing a glassy, thin, fractured sound. *Sul ponticello* is often used by contemporary composers, especially those like Grisey and Sciarrino who were interested in spectral music (using the sound spectra as the basis for their compositions), both of whom have written significant pieces for viola. It makes brief appearances in the standard repertoire as

¹³² Garth Knox, preface to *Viola Spaces* (Mainz: Germany: Schott, 2009).

¹³³ Werner Bachmann, et al., “Bow,” *Grove Music Online*. *Oxford Music Online*. <http://www.oxfordmusiconline.com.ezproxy.rice.edu/subscriber/article/grove/music/03753> (Accessed July 22, 2012).

well, specifically in the first movement of the Shostakovich Sonata and the ponticello variation of Britten's *Lachrymae* (example 3.2).

Example 3.1: Shostakovich Sonata for Viola and Piano, op. 147, movement I, mm. 161-170 (treble clef)

The musical score for Example 3.1 is presented in three systems. The first system, measures 161-164, begins with a treble clef, a key signature of one flat (B-flat), and a 3/4 time signature. It includes a 'sul pont. trem.' instruction and a piano (*p*) dynamic marking. The second system, measures 165-168, continues the melodic line. The third system, measures 169-170, concludes the excerpt. The notation features a tremolo effect over the notes, indicated by a 'tr' symbol.

In his etude on ponticello, Knox emphasizes that it should be played with an extremely light, fast bow throughout, as this will bring out all the high harmonics the best. The bow weight and speed that is appropriate for playing ponticello is very different than that which is normally used and often feels quite uncomfortable at first. In addition, when playing with such a fast, light bow, there is the feeling that one doesn't have the same control as when playing with more resistance from the string. Playing in this way very close to the bridge naturally results in a fear of "falling over" the bridge, and so many players either play with a bow that is too slow, too heavy, or too far from the bridge for a real *ponticello* sound to emerge. Knox addresses this fear in his etude by making the student learn to control going over the bridge and back again (example 3.3). Playing this etude prior to or in conjunction with working on the Shostakovich Sonata or the Britten *Lachrymae* will give students increased confidence in the *ponticello* sections, allowing them to develop a true *ponticello* sound.

Example 3.2: Britten *Lachrymae*, #8 to #9

8 Allegro marcia
a punta

ppp quasi ponticello *p* *pizz.*

arco *ppp* *mf*

pizz. *arco* *ppp* *cresc. III II*

f sempre *pizz.* *sf* *f*

mf *pizz.* *arco* *pp*

pizz. *attacca*

Example 3.3: Knox *Viola Spaces*, “Beside the bridge,” mm. 53-64 (alto clef)

moving over to behind the bridge

sim. *sfz* *fz* *fz* *sfz*

moving over the bridge, then back

sfz

3.2. *Sul tasto*

Sul tasto, or playing over the fingerboard, is also not a new technique. String players (especially bad ones) have been using it inadvertently since the beginning of string playing! However, as a specific effect, it is increasingly asked for in the twentieth century. It has the opposite effect as ponticello – playing far over the fingerboard with minimal weight and a very fast bow deadens the overtones and results in a hollow, flute-like sound. Often, it also has a breathy quality as well because of the bow noise that is audible. Ligeti calls for this effect in both the fifth and sixth movements of his Viola Sonata, marking each with “*da lontano*” (from a distance) as well:

Example 3.4: Ligeti Sonata for Viola Solo, movement V, mm. 9-11 (alto clef)**Example 3.5: Ligeti Sonata for Viola Solo, movement VI, mm. 80-89 (alto clef)**

Meno mosso, molto cantabile

sul tasto

pp sub. „da lontano“

84

Often, like *sul ponticello*, this effect isn't done correctly because players use a bow that is too heavy or too slow and the sound has too much focus. Playing over the fingerboard makes the sound softer, but composers often ask for this effect not just to change the dynamic, but also the quality of the sound. Failing to adjust the weight and speed accordingly will not accomplish this change in tone color. Knox's etude dealing with this technique, appropriately named "Ghosts," focuses on this aspect of *sul tasto*. In the notes accompanying the etudes, he asks the player to play in an extreme position over the fingerboard (with the bow higher than the upper corners of the viola) and mixes playing on the upper bouts of the instrument with playing on the strings:

Example 3.6: Knox *Viola Spaces*, "Ghosts," mm. 1-5

♩ = 44
sempre molto flautando
pp
play on corner bout

There should be as much air as pitch in the sound, even when playing actual notes. After practicing this etude, which is an extreme example of *sul tasto*, playing *sul tasto* with the appropriate tone color where it shows up in the literature becomes much easier.

3.3. Pizzicato

Plucked stringed instruments greatly predate bowed strings in history, so *pizzicato* (plucking the string) is definitely the oldest of the “extended techniques” discussed in this section. What *is* new is the range of *pizzicato* effects, from Bartók *pizzicato* (pulling the string vertically away from the fingerboard so it snaps back, producing a percussive sound) to using multiple fingers of both hands. Most *pizzicato* required in the standard viola repertoire is no different than that which has been used for centuries: individual notes plucked with a single finger on the right hand, rolled chords, or isolated left-hand

pizzicati used for virtuosic effect. The use of *pizzicato* for lengthy sections in solo works is rather new, however. Some examples are below:

Example 3.7: Shostakovich Sonata for Viola and Piano, op. 147, movement I, mm. 1-9

Moderato ♩ = 104

pizz.

p

Example 3.8: Clarke Sonata for Viola and Piano, movement II, beginning to 2 before #17

Vivace.

con sordino

p *ben marcato*

PIZZ.

ARCO

p

gliss. in piano

ff

Harm.

p

PIZZ.

pp

f

Example 3.9: Britten *Lachrymae*, #2 to #3

String players rarely practice *pizzicato*, so their *pizzicato* technique is often far less developed than their other abilities. Even the simple passages shown above sometimes have inconsistencies of tone, dynamic, and rhythmic evenness because players don't have the control over their *pizzicato* that they do over their bow. One solo sonata by Hindemith, known as the 1937 Sonata, although it is rarely played, has a very challenging and lengthy *pizzicato* section in the middle of the second movement (example 3.10):¹³⁴

¹³⁴ Paul Hindemith, *Sonata for Solo Viola* (1937) (Mainz, Germany: Schott, 1992).

Example 3.10: Hindemith Sonata for Solo Viola (1937), movement II, mm. 43-93

Lebhaft (♩=152)
Pizzikato *)

43 *pp*

48 *mp* *pp*

53 *p*

57 *mp* *mf* *3*

62

66 *pp*

71 *cresc.*

76 *f* *ff*

81 *C Saite*

84

88 *pp*

*) Zur Ausführung des Pizzikatos braucht der Spieler alle Finger der rechten Hand und muß deshalb den Bogen niederlegen.

Bartók *pizz.*, *pizz. tremolo*, strumming downward with the thumb, and the two hands doing cross-rhythms are also included:

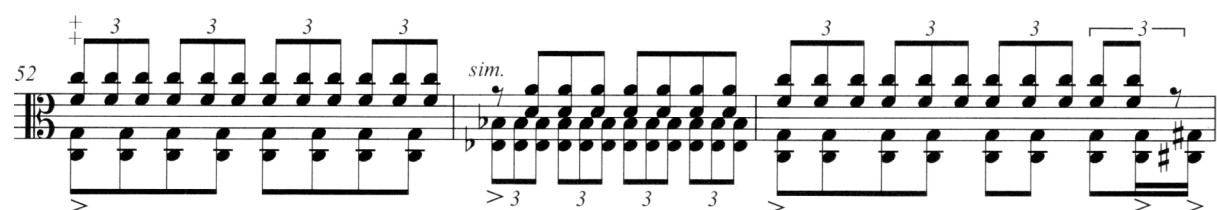
Example 3.14: Knox *Viola Spaces*, “Nine Fingers,” m. 48



Example 3.15: Knox *Viola Spaces*, “Nine Fingers,” mm. 64-65



Example 3.16: Knox *Viola Spaces*, “Nine Fingers,” mm. 52-54



Mastery of this etude will ensure that any *pizzicato* encountered in the repertoire will seem very easy in comparison!

3.4. Tremolo

Tremolo is also a very old technique, but Knox's etude dealing with *tremolo* is specifically designed to prepare violists to play the Berio *Sequenza VI*.¹³⁵ Berio wrote a series of fourteen Sequenzas between 1958 and 2002, each for a different solo instrument. Many of these, like the violin, flute, clarinet (saxophone), and trombone Sequenzas, are performed often and considered major twentieth-century repertoire pieces. The viola Sequenza is, historically, a very significant piece for the instrument, but it is rarely performed or studied because players cannot figure out how to do the extreme quadruple-stop, *fortississimo tremolo* that Berio asks for during the majority of the piece:

Example 3.17: Berio *Sequenza VI per viola sola*, first 3 lines



The secret is irregularity in the bow arm (both in the *tremolo* itself and in the movement across the strings) and practiced-in instant relaxation in the rests. Knox's etude addresses both of these. At the beginning, there are many rests. The note before the rest should be on an up-bow and serve as a release and relaxation for the arm (note also the scordatura in this etude):

¹³⁵ Luciano Berio, *Sequenza VI per viola sola* (London: Universal Edition, 1970).

Example 3.18: Knox *Viola Spaces*, “Rapid repeat,” mm. 1-19

scordatura:
tune C string down to B flat
sounds as written

pp 3 5 trem. 6

5 trem. p

9 measured trem. mp 3 3

14 measured trem. mf mp 6 6

In playing the *tremolos* in the Berio, it is necessary to move very quickly between the different strings to give the illusion of a constant quadruple-stop (which is impossible to do literally). This is approached in the etude in a variety of ways: as very fast arpeggios across the individual strings and in double-stops which move between pairs of strings:

Example 3.19: Knox *Viola Spaces*, “Rapid repeat,” mm. 58-59 (alto clef)

measured 1= 2 3

mf >

Example 3.20: Knox *Viola Spaces*, “Rapid repeat,” mm. 132-138 (alto clef)

measured

136

1

Example 3.21: Knox *Viola Spaces*, “Rapid repeat,” mm. 106-110 (alto clef)

trem.

f

1

2

3

To practice irregularity, he instructs the player to move up and down the bow while playing *tremolo*:

Example 3.22: Knox *Viola Spaces*, “Rapid repeat,” mm. 89-95 (alto clef)

move down bow

move up bow

mf

3

Finally, once all of these individual skills have been practiced, quadruple- and triple-stop *tremolos* are added:

Example 3.23: Knox *Viola Spaces*, “Rapid repeat,” mm. 116-119 (alto clef)



Learning this etude will not ensure that a violist can play the Berio *Sequenza* easily, as the challenges of that piece are many (including nearly impossible chords and extremely fast shifts), but it should be viewed as necessary preparation for anyone who wants to play it successfully and without hurting themselves.

Developing proficiency with tremolo, especially the ability to play it for long passages without fatigue, is also helpful for the end of Britten’s *Lachrymae*, which asks the player to play very fast doubled notes for thirteen very long measures. Although this is not a *tremolo*, the fatigue issue is very similar (example 3.24).

3.5. Other bow techniques

The final etude in *Viola Spaces*, called “Up, down, sideways, round,” addresses all the ways the bow can be used other than the normal back and forth. It uses *col legno* (playing with the stick), *gettato* (throwing the bow on the string and letting it bounce), *spazzolato* (bowing sideways to produce a brushing sound), and circular bowing (where the bow moves across the string in a circle, making a brushing sound that also has pitch in it). *Spazzolato* and circular bowing are often used by composers like Sciarrino, but never occur in standard repertoire. This etude develops right hand and finger dexterity, which can aid a violist in improving their bow control in general.

Example 3.24: Britten *Lachrymae*, 2 after #10 to 14 after #10 (alto clef)

cominciando *pp*

poco a poco cresc.

più animato

f sempre più

remain

Chapter 4: The Language of Twentieth-Century Music

For all Western musicians, our “native” language is that of tonal music. It is what we learn to play first as children and often, students start their Bachelor’s degree having rarely, if ever, played any music written after 1900. In addition to all of the technical challenges in playing new music described in this document, learning the language of twentieth-century music is equally a challenge. Many students claim not to like new music: it’s ugly, it doesn’t make sense, it’s too mathematic, or it’s just a bunch of noise. Many audiences feel the same way. I would argue that it’s much like learning a new language: when you first hear it, it doesn’t make any sense because it doesn’t use the same vocabulary and syntax as your native language. But once you learn this new vocabulary and syntax, you realize that it does, in fact, make sense and that, furthermore, it can have an equal or even greater emotional impact than standard tonal music. For a violist not to like post-tonal music is tragic because, as Primrose said, “our valid repertoire belongs mainly to the twentieth century...”¹³⁶ As important as mastering the techniques of twentieth-century music is mastering the language.

In addition to his etudes addressing twentieth-century technical concerns, Michael Kimber has written a set of three concert etudes in twentieth-century styles, called *Three Bagatelles*.¹³⁷ The first is in the style of Debussy, the second in the style of the second Viennese school, and the third in the style of Hindemith. Brief excerpts of each are below (examples 3.25, 3.26 and 3.27):

¹³⁶ Dalton, *Conversations*, 2.

¹³⁷ Michael Kimber, *Three Bagatelles* (Iowa City: SoundPointMusic, 1997).

Example 3.25: Kimber *Three Bagatelles*, Bagatelle No. 1 (Paris 1901), mm. 1-8

Modéré

mf *p* *mp sonore* *mf* *augmentez* *f bien rythmé*

Example 3.26: Kimber *Three Bagatelles*, Bagatelle No. 2 (Wien, 1922), mm. 1-9

Langsam

ppp *ff* *ppp* *gewöhnlich* *mp* *pp* *mf* *mp* *ppp* *mf* *f* *pp* *p* *ff drängend* *mf*

Example 3.27: Kimber *Three Bagatelles*, Bagatelle No. 3 (Berlin, 1928), mm. 1-9

Mit Kraft

simile

f

In addition to these, a few of the studies from the other book of his used in this document, the *20-Century Idioms for Violists*, address the varied musical languages of the twentieth century. The first is a twelve-tone scherzo. This study uses a language that many musicians find difficult to understand in a context that is very easy to understand:

Example 3.28: Kimber *20th-Century Idioms for Violists*, Twelve-tone study, mm. 1-11

Scherzoso (serial, but not serious) (♩ = 63)

p innocente

delicato

pizz. rit.

arco

f risoluto

a tempo

Playing this etude can help students see how they might make connections between aspects of tonal music (here, the character) and the language of twentieth-century music, helping them to understand it better.

The second study is filled with a variety of contemporary techniques, from glissandos to quartertones, to unusual pizzicato, among other things.

Example 3.29: Kimber *20th-Century Idioms for Violists*, Various Techniques study, mm. 1-12

The musical score for Kimber's *20th-Century Idioms for Violists*, mm. 1-12, is presented in a single staff in bass clef with a key signature of one flat (B-flat). The tempo is marked "Comodo, senza fretta (unhurried) (♩ < 60)". The score includes various performance instructions and techniques: "con sord." (con sordina) at the beginning, "jeté" and "p" (piano) in the first measure, "3" (triplets) in the second measure, "(quarter tones)" in the third measure, "sul pont." (sul ponticello) in the fourth measure, "mp" (mezzo-piano) and "hesitant, then scurrying" in the fifth measure, "p" (piano) in the sixth measure, "ord." (ordinario) in the seventh measure, "f" (forte) in the eighth measure, "upper notes sul D" in the ninth measure, and "risoluto" in the tenth measure. The score is divided into three systems, with measures 1-4, 5-8, and 9-12 respectively.

This study requires students to put together all of the disparate techniques they have learned through the narrowly focused etudes discussed here to play something technically polished and musically convincing. Because it is a short piece (only thirty-six bars), students can use it as a microcosm of a larger piece to learn how to make interpretive decisions in an ambiguous context. He has also included an aleatoric etude and a minimalist etude.

In addition to these etudes by Michael Kimber, many of the Uhl etudes in the 20 Etudes book can be used to address musical understanding. Besides the ones already mentioned, there are a number of etudes in this collection that focus on standard techniques (spiccato, legato, trills, dotted rhythms, marcato, etc.) written in early twentieth-century language. In addition to using Kreutzer, Dont, Campagnoli, and the rest of the standard etudes to address these issues, teachers should consider using the Uhl etudes as well to accomplish a dual purpose of teaching fundamental string techniques while

increasing understanding and appreciation for the language of twentieth-century music. Finally, Julia Bullard, viola professor at the University of Northern Iowa, has been writing a set of etudes entitled *Studies for the Contemporary Violist*. Although these are not yet available at the time of this writing, they will include both technical studies (supplementing those of Uhl and Kimber presented here) as well as concert etudes that focus on particular twentieth-century styles. When this book becomes available, it will be a wonderful addition to the small, but growing, body of pedagogical materials that help prepare violists for our standard twentieth-century repertoire.

CONCLUSION

The viola, throughout most of its history, was regarded as an auxiliary instrument, played only by those who could not succeed on other instruments, and given subordinate and expendable parts by composers. This resulted in a self-perpetuating cycle: there were no good violists, so composers didn't write rewarding music for the viola, so no good musicians took up the instrument because there was no worthwhile music to play. Compounding this was the fact that the most popular music during the Baroque era, which witnessed the rise of the violin as the primary solo instrument of the string family, often either did not give the viola a prominent role, as in the concerto grosso, or excluded it entirely, as in the trio sonata. This began to change in the eighteenth century as the string quartet became the predominant genre of chamber music and composers began to write increasingly interesting parts for the viola. In the nineteenth century, this development accelerated, with symphonic composers in particular writing viola parts that far outstripped violists' abilities to play them. This provided a significant impetus toward better instruction on the viola to enable players to handle the roles they had been assigned in orchestral music. The Paris Conservatoire was the first major conservatory to offer viola as a major in 1894 and the Eastman School of Music and the Curtis Institute of Music in the United States both followed in the early 1930s.

The early twentieth century also saw the rise of the first world famous viola soloists of lasting influence: Lionel Tertis and William Primrose. Through their tireless advocacy of the viola as a solo instrument, they inspired composers to write concertos, sonatas, and other solo works for them, greatly augmenting the literature. One of the most prolific composers for the viola, Paul Hindemith, single-handedly wrote us three concertos and seven sonatas. After World War II, music schools increasingly offered viola as a major instrument as they hired string quartets-in-residence and the quartet's violist became the school's viola professor. However, all of these violists had necessarily started on the violin and so had been trained using the standard pedagogical literature for that instrument. The large body of pedagogical materials written expressly for the viola in the late nineteenth century had fallen out of use

and the only materials left in print were transcriptions of the violin method books. Because they were the books with which viola professors were most familiar due to their training as violinists, a tradition started of using violin pedagogical material to train violists that continues to this day.

Tradition is a very hard thing to break, especially when that tradition is beneficial. Study of the violin methods gives violists a technical command of their instrument on par with violinists, and for this it is very useful. In this document, I in no way want to argue that traditional skills and competencies are unnecessary for violists. The violin etudes, scales, and exercises are necessary, but they are not sufficient. The standard repertoire of violists is vastly different from that of violinists because so much of it was written in the twentieth century. We should therefore have a pedagogy that reflects this difference, not one that leaves violists adrift, confused, and frustrated when they are confronted with Hindemith, Bartók, and Ligeti.

In my attempt to remedy this situation, I have presented a variety of exercises, scales, and etudes that deal with twentieth-century techniques. Most of them will be unfamiliar to students and teachers alike, but my hope is that teachers will see the merits in them and begin to introduce them into their studios. Many teachers believe that it is best if students learn their technique through studies and exercises and not in their music. The fear is that if students have to learn their technique through the literature itself, they will be so focused on the technical aspects that their ability to be expressive will be restricted. Unfortunately, most violists *have* to learn their technique through their music because they are given nothing to prepare them for the challenges they face.

To have a performing career, every violist must master post-tonal music. Every orchestral audition asks for Bartók, Walton, or *Der Schwanendreher*. Any chamber ensemble that hopes to succeed must play at least some twentieth-century music. And for the few violists that go on to have solo careers, twentieth-century concertos will be their essential repertoire. I hope this document will inspire teachers to gain familiarity with this newly available pedagogical literature, to develop new exercises beyond the ones presented here, and even to write their own sets of etudes addressing the non-traditional techniques they see their students struggling with. Not until we have our own unique pedagogical literature that

matches our repertoire will the viola truly have emerged from the shadows as an instrument independent and different from the violin.

Appendix 1 – Viola Quotes

The following quotes about the viola and violists appeared in various musical publications between the late eighteenth century and to late twentieth century. Reading them together gives a sense of the pervasive low esteem in which the viola was held for so long. They are listed here in chronological order, with just the date listed by the quote. The full citation for each quote appears in the footnotes at the bottom of the page. Quotes that appear in the document itself are not repeated here.

1789, Grétry: “I have often neglected the part of the violas which is so necessary to fill in the gap between the violins and the bass, and I hope that someone may be found to supply the want in my scores. It would indeed be easy for me to enlarge the task of the violas and bassoons, yet for whatever reason the idea does not tempt me.”¹³⁸

1814: “As for the viola it was like a rather garrulous old woman, with not much to say, but always wanting to horn in on the conversation.”¹³⁹

1844, Berlioz: “Of all orchestral instruments the one whose admirable qualities have been most persistently misunderstood is the viola. It is as agile as the violin, the sound of its lower strings has a particular pungency, its high notes have an especially sad and passionate character, and its profoundly melancholy tone makes its general character quite distinct from that of other stringed instruments. Yet it was long neglected or given the obscure and pointless duty, as oft as not, of playing an octave above the bass line. There are many reasons for the inequitable treatment of this noble instrument. First, most composers of the last century had no use for it since they only rarely worked four real parts, and when they could think of no immediate filling notes of the harmony they just wrote the fatal 'col basso', sometimes so carelessly that the result is a doubling of the bass line an octave higher in contradiction to the harmony or the melody or both. Second, it was unfortunately impossible at that time to write distinctive parts for the violas requiring any normal performing skill; players of the viol (the former name for the viola) were always drawn from discarded violinists. When a player could not manage to keep his place as a violinist he went over to the viola, with the result that viol players could play neither the violin nor the viol. I have to say that this prejudice against the viola has not entirely vanished to this day; there are still some viola players in the best orchestras who are no better at the viola than the violin. But the trouble this easy-going attitude can cause is more widely recognised every day, so that the viola will gradually come to be entrusted only to competent hands, like other instruments.”¹⁴⁰

“It should also be said that few violas in use in our French orchestras today have the requisite dimensions; they have neither the size nor, consequently, the sonority of true viols, being little more than violins fitted with viola strings. Conductors should refuse to tolerate these hybrid instruments whose weak sound dilutes one of the most interesting elements in the orchestra, depriving it of much of its energy, especially on low notes.”¹⁴¹

1912: “The viola players were recruited from the refuse of violin players. Whenever a violin player was incapable to fill his post as violinist respectably, he went to sit down amongst the viola players. The result

¹³⁸ *Mémoires ou Essais sur la Musique par Grétry*, Vol. 2, ed. J. H. Mees (Paris: La Lyre Moderne, 1829), 52, http://imslp.org/wiki/M%C3%A9moires,_ou_essai_sur_la_musique_%28Gr%C3%A9try,_Andr%C3%A9_Ernest_Modeste%29, quoted in Jacinta K. Howard, “The Viola – Up from Obscurity,” *American String Teacher* (Summer 1966): 12.

¹³⁹ Stendhal, *Vies de Haydn, de Mozart et de Métastase* (Paris: Le Divan, 1928), quoted in A.C. Keys, “The Woes of a Viola Player,” *The Strad* 61 (December 1950): 274.

¹⁴⁰ *Berlioz's Orchestration Treatise*, 35.

¹⁴¹ *Ibid.*, 40.

was that the viola players could neither play the violin nor the viola. I must even confess that this prejudice against the viola part has not entirely disappeared even in our time, that in the best orchestras there are still viola players who can handle a viola as little as a violin.”¹⁴²

1914: “The viola is one of the instruments in the orchestral ensemble about which none but musicians can tell you anything.”¹⁴³

“...the viola itself is not an instrument capable of expressing the many emotions which the violin can.”¹⁴⁴

1923: “With the examples of these masters (famous composers who played the viola) the young violinists need not feel that he will lose professional caste by taking up the viola for orchestra or chamber music playing.”¹⁴⁵

“It is not uncommon that the viola player in a quartet is a member of the first violin section of a symphony orchestra.”¹⁴⁶

“Where do the viola players come from? One almost never sees viola instruction advertised, while of instruction books there are few published and still fewer sold. The usual history of the making of a viola players is this: He is originally an experienced violinist, who takes up the viola because of a personal liking for the tone of that instrument, or because he sees a better opening for employment, either in an orchestra or a string quartet. Except for the fact that the viola demands the use of a slightly heavier bow than the violin, has slightly longer stretches for the fingers, and reads from a different clef, the technic [sic] of the instruments is identical, and an expert violinist scarcely needs a teacher or even an instruction book when he embarks on his adventures as a violist. All he needs is a few weeks’ diligent practice in mastering a new clef and becoming accustomed to a different stretch of the hand.”¹⁴⁷

1928: “...for some time, if a work contained a viola part it was played by a second violinist, who would yield to necessity by setting aside his preferred instrument in favor of the viola.”¹⁴⁸

1934: “Originally it was the oldest and most important member of the string family, but its prestige gradually diminished until it became a mere drudge, necessary for balance of parts but not considered of much worth in itself.”¹⁴⁹

“Before the advent of Tertis the impression obtained that passages much higher than the third position were totally ineffective.”¹⁵⁰

1935: “Sir Arthur Sullivan is alleged to have specified as his three pet aversions cold beef, cold mutton, and viola solos.”¹⁵¹

¹⁴² Edmund van der Straeten, “The Viola,” *The Strad* 23/268 (1912): 120.

¹⁴³ A. Walter Kramer, “The Viola: A Too Little Known Instrument,” *The Musician* 19 (September 1914): 629.

¹⁴⁴ Ibid.

¹⁴⁵ Horace Johnson, “The Composer’s Instrument,” *Musician* 28 (March 1923): 28.

¹⁴⁶ Ibid.

¹⁴⁷ Edwin Hall Pierce, “The Viola – The ‘Ugly Ducking of the Orchestra’,” *The Etude* 41 (November 1923): 797.

¹⁴⁸ Maurice Vieux, “Considération sur la Technique de l’Alto,” *Le Courrier Musical* 30 (1928): 216. Translated by Rick Anderson in the *Journal of the American Viola Society* 7 (Fall 1991): 5-6.

¹⁴⁹ Harold R. Harvey, “The Viola, a Really Great Solo Instrument, Part I,” *The Etude* 52 (March 1934): 194.

¹⁵⁰ Harold R. Harvey, “The Viola, a Really Great Solo Instrument, Part II,” *The Etude* 52 (April 1934): 260-261.

¹⁵¹ Charles N. Boyd, “The Viola – A Promising Oldster, Part I,” *The Etude* 53 (1935): 306.

“In later days Wagner had twelve violas to thirty-two violins, the same proportion that Strauss specifies for “Heldenleben,” but in “Elektra” eighteen violas vie with twenty-four violins. With this increase in numbers came a steady advance in demands upon the players, and the viola desk lost its reputation as an asylum for incompetent violinists.”¹⁵²

“The time worn objections to tone are apparently due more to the players than to the instrument...”¹⁵³

“...teachers who encourage pupils to study the viola and who are competent to instruct them seem to be nearly as rare as the instrument itself.”¹⁵⁴

1940: From a book of verses describing the various members of the orchestra:

“Violists spend the livelong day
In helping others on their way,
The fiddle’s friend, the ‘cello’s pal –
He helps the English Horn’s morale.
With envy eating out his heart
For just a tiny solo part.
No better phrase describes him than
The orchestra’s forgotten man.”¹⁵⁵

1941: “The viola, like the harp, shows a dependent development. That is to say, composers seem to have written less for the instrument itself than for some specially gifted viola player.”¹⁵⁶

“He must not attack [the strings] in the same way as a violinists does; for the violin, being more responsive, will answer even to a faulty attack. The viola, like the violoncello, may be fiercely attacked, but it defends itself.”¹⁵⁷

“It was long considered rather outlandish to go above the third position on the viola.”¹⁵⁸

“Another odd misconception regarding the viola came to light some time back, in a heated controversy that took its way into one of the London music journals....It was said that harmonics should not be attempted on the viola, because they are never effective.”¹⁵⁹

1944: “The attitude that viola playing is just a temporary experience may result in complete indifference to viola problems, a comparative ignorance of its possibilities and, furthermore, carelessness in such a fundamental point as learning to read the alto clef.”¹⁶⁰

1947: “Long slandered, all that the viola needed was a renaissance of good players and musical open mindedness.”¹⁶¹

¹⁵² Ibid.

¹⁵³ Ibid.

¹⁵⁴ Frank W. Hill, “The Viola as a Solo Instrument,” *The Etude* 53 (December 1935): 747.

¹⁵⁵ Laurence McKinney, *People of Note, A Score of Symphonic Faces* (New York: E.P. Dutton and Co., Inc., 1940): 19, quoted in Howard, “Up from Obscurity,” 12.

¹⁵⁶ Paige, “The Viola Claims its Rights,” 241.

¹⁵⁷ Ibid., 272.

¹⁵⁸ Ibid.

¹⁵⁹ Ibid.

¹⁶⁰ Rood, “A Plea for Serious Viola Study,” 399-400.

¹⁶¹ Robert Sabin, “Primrose Discusses Study of Viola,” *Musical America* 25 (April 1947): 29.

1950: “The German name ‘Bratsche’ has a suggestion of an urchin about it somehow – thought actually it is merely the Italian for ‘arm’. And the name of the player ‘Bratschist’ does sound like an insulting superlative of ‘brat’, doesn’t it?”¹⁶²

“... the viola is generally serious, not to say funereal, and the player is popularly supposed to be old, melancholy, ‘monolithic and grim’.”¹⁶³

“The violas need more and get less rest than any other section of the orchestral strings. Perhaps that is the real reason why viola-players grow prematurely old, harassed and decrepit.”¹⁶⁴

“...cases where the meek violas play the part of the down-trodden doormat to the cellos are too numerous to mention.”¹⁶⁵

“In spite of all their shortcomings the violas are apparently too useful – to do the menial jobs.”¹⁶⁶

1957: “Standards for playing the viola in the past have been considerably lower than for either the violin or the violoncello. ‘All viola players are disappointed violinists’ in many instances has, unfortunately, been true.”¹⁶⁷

“Not all violin teachers, unfortunately, are familiar with the various phases of viola technique. Many excellent violin teachers who have been reluctant to play the viola themselves for fear of ruining their violin intonation have not been hesitant to accept students of the viola.”¹⁶⁸

“We Americans are traditionally a nation of leaders. A fine violist must in many instances modify his dominating personality.”¹⁶⁹

1966: “The viola section in orchestras of a century or more ago was generally composed of indifferent or infirm violinists, hence the sly German expression ‘Pensions-instrument.’”¹⁷⁰

1968: “I advise a student to start on violin and develop a violin technic [sic], acquire knowledge and learn the literature. There are cases of fine violists who began on viola but this is the exception. I am reluctant to take a student who has not studied the violin... Without that violin background and invaluable training, I wouldn’t have dared to tackle anything above the third position.”¹⁷¹

1973: “Viola playing in the pre-Tertis period tended to be an unpopular and obscure vocation much maligned, sometimes compared to a contralto suffering from a nasal infection, other times likened to the pangs of indigestion wrought by cold mutton. Barbirolli, in a quiet aside once to a friend, commented: ‘If you’d heard the violas when I was young you’d take a bismuth tablet.’”¹⁷²

¹⁶² A.C. Keys, “The Woes of a Viola Player,” 274.

¹⁶³ Ibid.

¹⁶⁴ Ibid.

¹⁶⁵ Ibid., 274-275.

¹⁶⁶ Ibid., 275.

¹⁶⁷ Donald B. Norton, “Playing the Viola,” *The Instrumentalist* 12 (November 1957): 74.

¹⁶⁸ Ibid.

¹⁶⁹ Ibid., 76.

¹⁷⁰ Howard, “Up from Obscurity,” 12.

¹⁷¹ Milton Thomas, “Viola Limitations are Passé,” *Music Journal* 26 (May 1968): 24.

¹⁷² Robert Lewin, “Ninety Six Today,” *The Strad* 83 (February 1973): 489.

“About the time when the Tertis influence began to intrigue the world, and viola players were being quietly admitted to polite society, people were gratified to find that they were normal beings, occasionally a little better than that.”¹⁷³

1974: “Recently, a viola student came to his lesson in a highly disturbed state. An unpleasant argument had developed with a talented violinist friend. The latter claimed that the viola is easy to play and that furthermore, everyone knows that violists are merely old men who can no longer play the violin.”¹⁷⁴

1992: “Some towns boasted some highly picturesque teachers, including a certain Mr Jean, in Le Mains in 1895, who offered to teach both viola and trombone!”¹⁷⁵

¹⁷³ Ibid.

¹⁷⁴ Louis Kievman, “The Viola...It’s Easy to Play!” *American String Teacher* 24 (Autumn 1974): 33.

¹⁷⁵ Frédéric Lainé, “Violists of France Unite!” 331.

Scales in fifths

Diatonic:



All perfect fifths:



Scales in sevenths

Diatonic:



All minor sevenths:



All major sevenths:



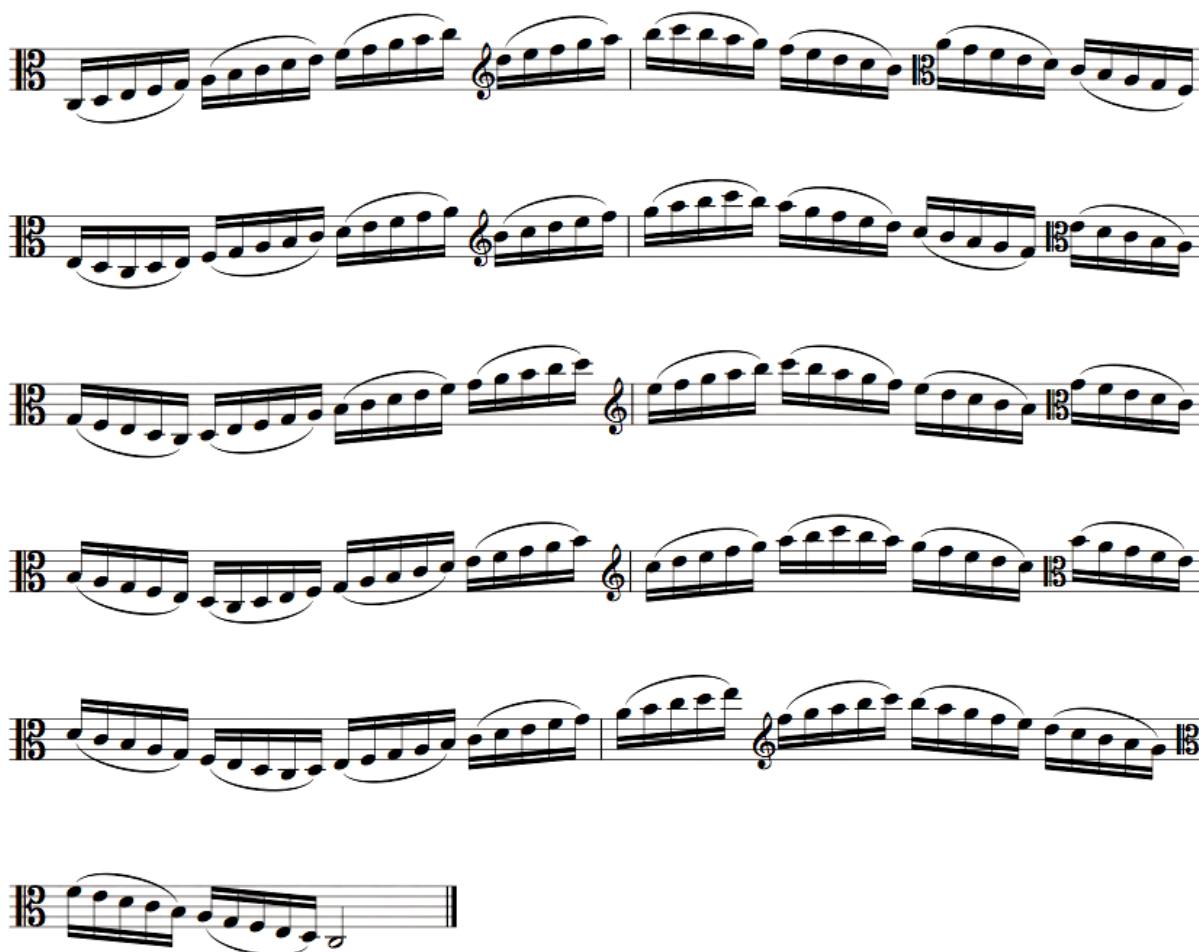
Scales in harmonics



Tuplet Scales

The following scales are written in C major as an example, but should be practiced in all keys.

“5X5”: Scale in quintuplets, five times in a row



Alternating tuplets (many more combinations are, of course, possible)

The image displays seven musical staves, each representing a different combination of alternating tuplets in 3/4 time. Each staff consists of two measures: the first measure is in 3/4 time and the second is in 3/8 time. The staves are as follows:

- Staff 1: 5-note and 5-note tuplets.
- Staff 2: 7-note and 7-note tuplets.
- Staff 3: 3-note and 5-note tuplets.
- Staff 4: 3-note and 7-note tuplets.
- Staff 5: 5-note and 5-note tuplets.
- Staff 6: 7-note and 7-note tuplets.
- Staff 7: 5-note and 7-note tuplets.

The following two scales are examples of tuplets over more than one beat. Like the above scales, many more combinations are possible and should be practiced.

The image displays two musical staves, each representing a scale with tuplets over more than one beat in 3/4 time. Each staff consists of two measures: the first measure is in 3/4 time and the second is in 3/8 time.

- Staff 1: A 5-note tuplet spanning two beats in the first measure, followed by a 5-note tuplet in the second measure.
- Staff 2: A 7-note tuplet spanning two beats in the first measure, followed by a 7-note tuplet in the second measure.

Arpeggios

Slurred in groups of 4



Slurred in groups of 5



Slurred in groups of 7

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